A Dissertation

entitled

College Self-Efficacy and Campus Climate Perceptions as Predictors of Academic Achievement in African American Males at Community Colleges in the State of Ohio

by

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The purpose of this study was (a) to provide an analysis of the levels of college self-efficacy and of the campus environmental perceptions of African American males at rural, urban, and suburban two-year community colleges in the state of Ohio and (b) to determine whether there was a statistically significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges (rural, urban, and suburban) in Ohio. Further, the study examined whether academic achievement could be predicted from academic self-efficacy and campus environmental perceptions at community colleges in the state of Ohio.

Descriptive statistics and a chi-squared analysis were employed in this study to determine that respondents were representative of the entire population or sample. A correlational analysis revealed a statistically significant positive correlation between college self-efficacy and campus environment. This correlation suggests that students who perceive a more positive environment tend to have higher college self-efficacy. A statistically significant positive correlation also was found between college environment and two specific dimensions of college efficacy: course efficacy and social efficacy.
Multiple regression analysis revealed that college self-efficacy is a significant predictor of expected GPA among African American males in two-year community colleges, but college environment was not a statistically significant predictor. Results of the regression analysis also indicated that course self-efficacy and social self-efficacy (the two components of college self-efficacy) were statistically significant predictors of expected GPA, but college environment was not. Results of the regression analysis revealed that college self-efficacy was a statistically significant predictor of past-term GPA, but college environment was not. Neither course self-efficacy nor college environment predicted past-term GPA, whereas social self-efficacy and college environment were statistically significant predictors of past-term GPA. Additionally, results of the regression analysis showed that the interaction was not statistically significant, meaning that the influence of campus environment on academic achievement did not vary based on the level of course efficacy or on the two components of college self-efficacy (course self-efficacy and social self-efficacy) among African American males in two-year community colleges.

Results of this study suggest that student affairs practitioners, administrators, faculty members, and policymakers should be present as role models for African American male community college students. Results also suggest that administrators (especially those who pair African American male students with faculty mentors) should focus on increasing the college self-efficacy of this particular student population.
I lovingly dedicate this work...

To my parents, Deacon Walter J. Jones and Mrs. Carolyn B. Jones and to my sister Audra T. Jones. To my mommy, who has believed in my ability to achieve the impossible since I was a little girl and always gave me words of encouragement along my educational journey. You instilled in me since I was three years old that I was destined for great things. Your unwavering love for me is contagious, and I pray that when I have children one day, I will be half the mother you are! To my daddy, who has been a blessing to his “My Jacque” all the days of my life. Thank you for the love shown to me and the shoulder to lean on. I will always be “Your Jacque, your baby girl.” Your hard work and dedication to our family is what I look for in my future husband one day! I am a daddy’s girl to my core! To my sister, Audra T. Jones, who has been the best big sister a girl could ever have. Thank you for teaching me so much during my lifetime and helping me grow into the woman I am today. It is a blessing to have you as not only my sister, but my best friend as well. I love you so very much! In loving memory of my maternal grandparents, who are with me in spirit, the late Calvin C. and late Sarah E. Bowden; my paternal grandparents, the late J.D. and the late Exie Jones; and my godparents, the late Dave “Big Son” and the late Elvira Cowans. I miss each of you and know you are smiling down on me because I can feel your presence.
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Chapter One

Introduction

Following the American Civil War, African Americans seized every opportunity to formalize and expand upon underground, secretive, educational practices that had functioned during the period of slavery (Allen & Jewell, 2002). Thus, the first collegiate institutions to open their doors to African Americans, or “Blacks” (these two terms will be used interchangeably throughout this dissertation), were midwestern reformatory colleges and a few liberal arts colleges in New England during the 19th century (Gallien & Sims Peterson, 2005). Formal education was a means for African Americans to achieve social mobility while defending and extending their newly gained rights as citizens (Allen & Jewel, 2002). Northern missionary societies became involved in the African American struggle and helped secure educational access for Blacks venturing into urban and rural Black communities as teachers and establishing and operating educational institutions at varying educational levels (Allen & Jewel, 2002).

Today, community colleges play a vital role in the higher education landscape in America because they have built their activities around an open-door policy of providing college access to a wide range of students (Boggs, 2004). “Minority students represent 6 - 8% of all students enrolled in higher education, yet they constitute nearly 60% of the total enrollment in community colleges” (Nora, 2002, p. 3). Of those, African American males make up 31.1% of the total population who are enrolled in community colleges (US Census Bureau, 2008). In addition, Black males attend community colleges in greater numbers than do Black females and their Asian and White male counterparts, according to the California Postsecondary Education Commission Report (2006).
Given the large number of students who attend these open-door public institutions, it is not surprising that student retention and success are key issues of concern. While the value of higher education is clear, many students who enter the community college, particularly African American males, fail to finish or transfer within 10 years (Bailey & Morest, 2006). The American College Testing Program, Inc. (ACT) has indicated that first-year attrition rates for all students at two-year community colleges are approximately 50% and holding steady (American College Testing [ACT], 2006; Horn & Berger, 2005). In many cases, community college students are at-risk students facing insurmountable barriers to academic success (Cohen & Brawer, 2003). Some of the barriers include family and work pressure, poor academic skills, inadequate preparation, and lack of connection to the college (McArthur, 2005; Tinto, 1990).

A central component of the community college mission is to help students succeed in addressing these barriers. Urban community colleges serve extremely diverse student populations in most inner cities in the United States. According to Zamani (2003) and others (Cook & Córdova, 2006; Lester, 2008a, 2008b; Townsend, 2008), community college student populations comprise the most diverse collegiate student groups in the United States. People from many different backgrounds attempt to optimize their opportunity for a better life through higher education via urban community colleges. As Hirose-Wong (1999) noted, “Urban community colleges—those located in or close to major cities—play a key role in higher education by serving economically, educationally, and ethnically disadvantaged, and nationally diverse student populations” (p. 1). Urban community colleges are “providing knowledge, skills, and support for upward mobility in
society. These institutions are ‘gateways to democracy’ for those who might otherwise be denied access to higher education” (Hirose-Wong, 1999, p. 1).

College enrollment rates among African Americans are on the rise. According to the Journal of Blacks in Higher Education (2007), approximately 2.1 million African Americans were enrolled in higher education throughout the United States. In 1996, 28.6% of all African American high school graduates, between the ages of 18 to 24, were enrolled in college (Vital Signs, 2008). Further, in the year 2000, the percentage of the same population and age group increased to 30.5% and in 2006 increased to 42%.

However, even with the enrollment gains that African Americans have made to achieve access to higher education, there still remains a significant difference between the educational attainment and academic success of African Americans, specifically males (United States Census Bureau, 2008). For instance, 19.5% of African American males over the age of 25 have a bachelor’s degree, in comparison to 35.5% of White Americans (Vital Signs, 2008). Additionally, thirty-six percent of Black students obtain an associate’s degree compared to 23% of White students (United States Department of Education, 2010).

Startling national statistics have provided an indicatory of the scope of the Black male crisis. In 2006, fewer than 50% of Black males graduate from high school and even less enroll in college (Cuyjet, 2006). Many reasons have been widely documented that account for this group’s underrepresentation in post-secondary education. Black males have been retained at lower rates than the overall student population at community colleges in higher education. Cuyjet (2006) found in his analysis of the 2000 U.S. Census and the Chronicle of Higher Education 2005 Almanac that although Black males
represented 47.5% of the African American population in 2000, only 35.8% enrolled in college in 2002. Black students often have not been encouraged to achieve academically during their primary and secondary education; have the lowest high school grade point average (GPA) compared to other groups; fail to finish high school at higher rates; are disproportionately targeted for disciplinary actions, including expulsion; and are disproportionately placed in behavior disorder and special education classrooms (Bailey & Moore, 2004; Cuyjet, 2006; Strayhorn, 2008). Therefore, those who do make it to college typically lack crucial requirements for success, including basic comprehension skills, reading skills, writing skills, and test-taking skills (Adelman, 2002).

According to Khumoestsile and Pelonomi (2003), African American males who do enroll in higher-education institutions have experienced high attrition rates, and many have not completed their bachelor’s degree within six years. Their graduation rates have been declining for the last 20 years, from 35.3% in 2001 to 24.7% in 2003 (Khumoestsile & Pelonomi, 2003). A 2006 U.S. Department of Education report showed that only 9% of all students receiving a baccalaureate degree were Black in 2001, while 27% of all students receiving a baccalaureate degree were White. Fewer than 3% of Black males earned their degrees from 2001 to 2002 (Cuyjet, 2006). In addition to the race gap, the scholastic achievement gap between Black males and Black females has not gone unnoticed. Studies have suggested that Black females are twice as likely to earn their baccalaureate degrees than their Black male counterparts (Cuyjet, 2006).

For any student, particularly African American males, adjusting to a new social and academic environment can be a challenging experience. Race, ethnicity, and socioeconomic factors (Neville, Heppner, & Wang, 1997), as well as lack of academic
preparation (Bowen & Bok, 1998), can further complicate student adjustment to college. The high stress level often associated with making the adjustment to college can be exaggerated by one or more of the above factors (Smedley, Myers, & Harrell, 1993). College adjustment (academic and social) is essential for the academic progress of all students, particularly African American males who attend community colleges. A variety of factors can lead to academic failure and prevent African American males from successfully completing a collegiate academic program.

In addition to race, ethnicity, and academic preparation, Cuyjet (1997) has identified a number of social factors that prevent some African American males from doing well academically in college, including homicide, incarceration, high dropout rates, health problems, financial hardships, and an absence of positive role models. Those males who have been impacted by some or all of these social factors tend to carry emotional scars that can affect their ability and self-efficacy in acquiring strategies that enhance their personal and academic development (Howard-Hamilton, 1997). Because of its importance, some racial minorities and underprivileged individuals utilize education as a means to better the quality of their lives (Richardson, 1992). Some African Americans, particularly males who go to college, display indifferent, unmotivated, and apathetic behaviors in their pursuit of higher education (Richardson, 1992).

On a national level, many African American males have experienced a downward spiral in life, which contributes to their social difficulties (Paul-Dixon, 2007). On a daily basis, the media has continued to portray the same negative problems that plague this group in society, yet no effective resolution has been provided (Paul-Dixon, 2007). Gibbs (1988) indicated that Black males are portrayed in a limited number of roles, most of
them deviant, dangerous, and dysfunctional. This constant barrage of predominantly disturbing images inevitably contributes to the public’s negative stereotypes of Black males, particularly those who are perceived as young, hostile, and impulsive. Gibbs (1988) further suggested there is no room in this picture for comprehension, caring, or compassion of the plight of these Black men.

One of the most troubling problems in urban education is that Black children, particularly males, have been categorically underserved by public schools. The plight of Black males in the American educational system has become a topic of concern and discussion. Black males have dropped out of school in unprecedented numbers and are more likely to be unemployed, addicted to drugs, and otherwise socially impaired than their White counterparts (Cuyjet, 2006). Black males have struggled to gain a positive self-image and identity in higher education and yet continue to remain underrepresented. The negative image of Black males does little to support their post-secondary education opportunities. In light of these facts, it is not surprising that the social condition and self-efficacy of Black males is a topic of national discussion (Cuyjet, 2006). The negative self-image that Black males have about themselves can result in lower college self-efficacy. Stereotypes can negatively impact this group’s self-efficacy. Bandura (1997) described self-efficacy as “the belief in one’s capabilities to organize and execute courses of action required to produce given attainments” (p. 3). Through research, Bandura (1997) has clearly linked academic achievement to academic self-efficacy.

Nationally, colleges and universities throughout the United States face the challenge of ensuring that retention and graduation rates of underrepresented groups increase. There have been ongoing dialogues, diversity plans, programs, statewide
planning, seminars, conferences and a host of other activities and endeavors that took place concerning this vital issue (Dumas-Hines, 2001). As Tatum (2005) indicated, it is hardly surprising that Black males in education, with respect to their educational attainment and most indicators of academic achievement, also show signs of distress.

Once in college, Black males face additional challenges and require targeted support in order to be successful. Research has suggested that involvement in clubs and organizations; supportive relationships with faculty, administrators, and peers (Strayhorn, 2008); academic support services; and a welcoming campus environment (Flowers, 2006; Swails, 2000) are factors that have contributed to their success. If support is absent, research has suggested that Black males are less likely to become academically and socially integrated into college life, which in turn increases the probability of their of dropping out (Tinto, 1993). More than two-thirds of all Black males who enter college depart before earning their college degree—the lowest degree completion rate among all races and both sexes (U.S. Department of Education, 2010).

Additionally, campus environment is another important factor that contributes to the success of African American males, especially in the community college setting. Campus environmental factors that can help facilitate the academic achievement of African American males include encouragement by college faculty members to become involved in clubs and organizations; supportive relationships with faculty, administrators, and peers (Strayhorn, 2008); academic support services; and a welcoming campus environment (Flowers, 2006; Swails, 2000). Isolation is yet another campus environmental factor for community college students. A key component to creating an environment that is perceived as friendly, inviting, and helpful must involve faculty
members who are willing to assist students of color in their academic, social, and personal development (Wright, 1987). DeSousa and Kuh (1996) suggested that the opportunity to meet with instructors both inside and outside of the classroom as well as faculty members referring students to student support programs, such as tutoring services and student organizations, are simple ways faculty members can facilitate the integration of African American students to the university. The climate in which this integration occurs influences student learning and social outcomes (Pascarella & Terenzini, 1991), which makes campus climate an important factor that higher education administrators, policymakers, and researchers should carefully consider.

**Statement of the Problem**

Most of the scholarly research investigating Black students has focused on the relationships among racial identity attitudes, academic self-efficacy, and academic achievement of Black male high school students (Woodroffe, 2011). Additional studies have focused on African Americans at large, four-year institutions; however, studies focusing on African American males at the community college level (Harvey-Smith, 2002) are rare. Although scholars have studied self-efficacy and academic achievement of Black college students, most research has focused on students in four-year institutions or in secondary schools.

Studies on “the topics of attribution, self-efficacy and self-esteem, and their relationships to other variables, such as academic performance and career behavior in White students in seeking graduate education” (Alvarez, 1992, p. 1) also have been conducted. Several older studies conducted by Lent, Brown, and Larkin (1984, 1986, 1987) examined associations between self-efficacy beliefs and multiple variables that
contribute to academic achievement. Research conducted by Lent, Brown, and Larkin (1984) examined self-efficacy beliefs and success of college students majoring in science and engineering fields. Other researchers have explored the associations between self-efficacy beliefs and variables of academic performance, such as persistence in various settings, and found that self-efficacy beliefs were associated with persistence and performance (Bouffard-Bouchard, Parent, & Larivee, 1991). Additionally, individuals who had stronger self-efficacy persisted longer and performed better academically (Bouffard-Bouchard, Parent, & Larivee, 1991).

In summary, college self-efficacy of Black males in two-year institutions of higher education and the campus environmental factors associated with the academic achievement of Black males in this environment remain understudied. Scholars still need to understand how African American males perceive their academic abilities and how community college experiences impact their beliefs and academic performance. The present study will fill the gap related to the academic success of Black males and the role that the community college environment plays in facilitating their college self-efficacy. The large prevalence of Black males in community colleges and the social predisposition of Black males to undervalue their abilities suggest that it is imperative to investigate the interrelationships between college self-efficacy, campus environment, and academic achievement of Black males.

**Purpose of the Study**

The purpose of this study was (a) to provide an analysis of the levels of college self-efficacy and of the campus environmental perceptions of African American males at two-year community colleges in the state of Ohio (rural, urban, and suburban), and (b) to
determine whether there was a significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges in Ohio. Further, the study sought to determine whether academic achievement could be predicted from academic self-efficacy and campus environmental perceptions of community colleges in the state of Ohio.

**Research Questions**

The research study was guided by the following research questions:

1. What is the level of college self-efficacy among African American males in two-year community colleges?
2. How do African American males in two-year community colleges perceive their campus climate/environment?
3. Among African American males in two-year community colleges, is there a significant relationship among college self-efficacy and campus environmental factors?
4. Can academic achievement of African American males in two-year community colleges be predicted by college self-efficacy and/or campus environmental factors?
5. What is the effect of college self-efficacy on the relationship between campus climate and academic achievement?

**Significance of the Study**

This study provides both theoretical and practical insight into the Black male community college population. It clarifies the impact that community colleges have on Black males and their beliefs in their ability to achieve their academic goals. The study
examined Black males at rural, urban, and suburban community colleges in the state of Ohio to determine whether academic achievement and college self-efficacy are different for Black males matriculating in these campus environments (i.e., rural, urban, and suburban). This research study contributes to the understanding of community college environments, increases understanding about the Black male population, and provides a greater understanding of institutional fit for Black males at community colleges.

This study helps educators better understand the emotional states of their Black male students by (a) addressing personal factors, such as faulty self-beliefs and habits of thinking; (b) improving their overall skills, such as academic skills and self-regulatory practices; and (c) altering environmental factors, such as college and classroom structures, that may undermine student success (Pajares, 2002). The results of this study also revealed strategies that personnel can use to improve programs and services targeting college adjustment for this population.

Practically, it is important for administrators in higher education to understand the role they play in the academic achievement of Black males. Positive predictors of successful outcomes have been found to include integrated faculty, staff, and student relationships, both inside and outside the classroom, in which students feel comfortable seeking academic assistance and faculty members are active participants in student organizations (Davis, 1991).

In addition, this study provides faculty and staff members with a greater appreciation of the need to diversify faculty and staff members and to provide role models for Black males on community college campuses as a way of increasing their self-efficacy. If more minorities, particularly males of color, are hired and retained in key
administrative positions at community colleges, Black males will feel like they have a place on campuses that can often feel isolating. Shabazz (2006) suggested that “having Black male educators as role models allows Black male students who struggle against the negative perception offered through the media and society itself, to view Black males in a positive light in positions of authority” (p. 158). The academic success of Black males may increase at community colleges if faculty members, staff members, and administrators put theory into practice. This study helps community college personnel better understand and address the specific needs of Black males through a series of recommendations related to the study.

**Methodology**

This study employed a survey research design. Quantitative methods of data collection and data analysis were utilized. Participants in this study were African American males who were currently enrolled in community colleges in a rural, urban, or suburban setting in Ohio. The inclusion criteria for the population required participants to have been enrolled for at least one semester in a community college and thus able to report a GPA. The researcher identified an administrator, faculty member, or staff member at each institution who was responsible for a large number of African American males in their collegiate programs. These individuals served as liaisons to the researcher and also assisted in increasing the response rate. This approach helped separate the researcher from the students (thus reducing bias) and also established a communication mechanism to facilitate contact between the liaison and the students who participated in the study. This arrangement also helped keep student responses confidential and anonymous.
Ohio was selected because of the large number of African American males attending community colleges within the state. Three community colleges from Ohio were chosen based on their type (i.e., rural, urban, and suburban) and the number of African American males enrolled (colleges with higher enrollments of African American males were given priority.) The researcher conducted a review of community colleges based on the Carnegie classification criteria for community colleges to determine which community colleges would be invited to participate in the study. Three community colleges were selected as sites in the study, and the researcher selected one public rural, one public urban, and one public suburban community college to participate.

Data were collected through a modified survey instrument. The survey collected data on college self-efficacy as measured by the College Self-Efficacy Inventory (CSEI) (Solberg et al., 1993). The CSEI divides college self-efficacy into (a) course efficacy and (b) social efficacy, and students’ responses are measured on a Likert scale. “Course efficacy” refers to students’ belief in their ability to complete classroom work, and social efficacy refers to the level of efficacy students perceive they have regarding social activities inside and outside the classroom (Solberg et al., 1993).

The survey also was designed to collect data on the campus environment and campus climate by incorporating a modified version of the University Environment Scale (UES) (Gloria & Robinson Kurpius, 1996). The UES examines students’ perception of the university environment along a continuum ranging from “unfriendly and insensitive” to “welcoming and engaging.” As mentioned by Nora and Cabrera (1996), the student adjustment model suggests that the experiences of students in college are reflected in two domains: social and academic.
Finally, the questionnaire collected data about the students’ academic achievement as measured by the grade point average (GPA) reported by students. The questionnaire was delivered electronically to participants via email. The email message contained a URL for the questionnaire and was distributed by the campus liaison. Qualtrics, an online survey and research tool, was used to create the questionnaire and collect the data.

Data was analyzed in three stages. First, a descriptive analysis of African American males’ self-reported college self-efficacy, campus climate and environmental perceptions (correlational variables), and academic achievement was conducted. Further, correlational analyses were conducted to determine whether these variables were statistically correlated with each other. A correlational research method quantifies the strength of the relationship between two or more variables (Graziano & Raulin, 2000). Correlational research can be used for prediction, yet the correlations do not establish causation (Graziano & Raulin, 2000). Correlational research design is often included in larger research studies to provide data that might help the researcher interpret the primary findings of the study (Graziano & Raulin, 2000). Lastly, multiple regression analysis was used to determine whether academic achievement could be predicted from two or more variables in this study.

**Definition of Terms**

For the purposes of this study, the following terms were defined in order to reduce ambiguity and increase clarity:

*Academic Self-Efficacy.* Students’ belief in their capability to master academic activities (Bandura, 1994), including mastering various types of subject matter and
utilizing self-regulated learning strategies, such as goal setting, time management, note taking, self- monitoring, and self- evaluation (Zimmerman & Cleary, 2006). For the purposes of this study, academic self-efficacy was defined as students’ belief in their capacity to achieve academically and their belief in their capacity to self-regulate their learning through the social aspect of college self-efficacy (Solberg, 1998).

*Academic Achievement.* Academic achievement was operationalized as participants’ self-reported grade point average (GPA).

*Campus Perception.* Students’ adjustment to the campus climate of the college (Nora & Cabrera, 1996).

*Community Colleges.* For the purposes of this study, the definition offered for two-year institutions on the IPEDS website was employed: “A postsecondary institution that offers programs of at least 2 but less than 4 years duration. Includes occupational and vocational schools with programs of at least 1800 hours and academic institutions with programs of less than 4 years. Does not include bachelor’s degree-granting institutions where the baccalaureate program can be completed in 3 years” (NCES, 2006b, p. 71).

*First-Year Experience (FYE) Course.* A course that is designed to help first-year students with their transition into college (Baldwin, 2008).

*Rural Community Colleges.* For the purposes of this study, this definition was taken from the Carnegie Classification, which defines rural-serving institutions as located within areas with a lower total population of 500,000 or not in a metropolitan area (Carnegie Foundation for the Advancement of Teaching, 2012).

*Student Success Course (SSC).* A course designed to help students develop the study skills they need to succeed in college (Wong, 2012).
Urban and Suburban Community Colleges. For the purposes of this study, this definition was taken from the Carnegie Classification, which defines these colleges as urban-serving and suburban-serving institutions. They are physically located within populations exceeding 500,000 people, according to the 2000 Census, and are located in a primary metropolitan or metropolitan area (Carnegie Foundation for the Advancement of Teaching, 2012).

Assumptions

The assumptions in this research are embedded in one of the theoretical underpinnings of this study. The basic tenet of Bandura’s self-efficacy theory is that behavior is dynamic and is a consequence of continuous, reciprocal interaction between an individual’s psychological processes, past behaviors, and current environment. Parjares (2002) has noted that other fundamental assumptions are that people have the capability to learn through observation, to self-regulate, and to perform behaviors. Another assumption of the study was that all participants would (a) possess the ability to read and understand the survey directions and (b) answer the questions honestly and accurately.

Delimitations

For purposes of this study, there were three delimitations that the researcher identified. First, the researcher conducted the study only in the state of Ohio because of convenience and to manage the scope of the study. Next, four-year institutions were not included. Rather, this study was further delimited to the investigation of two-year community colleges because they have not been widely studied. The concern here was how the use of this information would be generalized to other populations of the same
ethnic background. Lastly, the study was delimited to Black males at community colleges.

**Limitations**

This research project was bound by several limitations. First, since the sample included respondents from only three community colleges, the results may not be generalizable to all community colleges in Ohio. By design of the study, some members of the Black male population were not covered by the sampling frame; therefore, some members of the population had no chance of being selected into the sample.

Secondly, participation in this study was voluntary for students who received the survey; therefore, the data collection process was selective rather than random. According to Onwuegbuzie (2000), all quantitative research is subject to limitations from methodological threats to internal and external validity. Internal validity is present if the intervention did in fact cause the outcome. For this study, two methodological threats to validity were recognized: (a) an inability to infer causality because of the nature of the study and (b) the possibility that the results were attributable to chance because the variables might correlate significantly with each other when in fact no statistically significant relationship exists (i.e., a Type II error) (Onwuegbuzie, 2000).

Third, non-response error served as a limitation. Challenges existed for students completing an electronic survey that were not present for students completing the paper survey. This resulted in students experiencing problems navigating the survey and, as a consequence, deciding not to respond. Cui (2003) has stated that “no matter how carefully a sample is selected, some members of the sample simply do not respond to the survey questions” (p. 2). Fourth, “sending surveys by mail or email is very inexpensive,
but also suffers from low response rates and many may not give the depth of responses possible as face-to-face and telephone surveys” (Slavin, 2007, p. 106).

Finally, bias served as a limitation to the study because students who were interested in the study were most likely to respond to the survey.

**Summary**

The purpose of this study was to provide information about the levels of college self-efficacy of Black males, about their environmental perceptions, and about their academic achievement. African American males in community colleges in the state of Ohio were studied. More specifically, the purpose of this study was to analyze the levels of college self-efficacy and the campus environmental perceptions of African American males at two-year community colleges in the state of Ohio (rural, urban, and suburban), and to determine whether there was a statistically significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges in Ohio. In addition, the study examined whether academic achievement could be predicted from academic self-efficacy and campus environmental perceptions at community colleges in the state of Ohio.

Chapter 2 presents a comprehensive literature review of the three bodies of research providing the overarching framework for this research analysis: (a) African American males and their academic achievement, (b) academic self-efficacy and perception of the campus environment/climate by African American males, and (c) barriers identified in literature. The chapter also reviews the theoretical framework that guided the study. Chapter 3 describes the research design, the variables, the respondents, the instrument, and the field procedures that were used to collect and analyze the data.
Chapter 4 presents the results of the research study, and, lastly, Chapter 5 discusses the results, provides a summary of the findings, identifies implications for practice, and provides recommendations for future research.
Chapter Two

Review of Literature

The purpose of this study was (a) to analyze the levels of college self-efficacy and the perceptions by African American males of the campus environment at two-year community colleges in the state of Ohio (rural, urban, and suburban), and (b) to determine whether there is a significant relationship between college self-efficacy, perceptions of campus environment, and academic achievement at these types of community colleges in Ohio. The study further examined whether academic achievement could be predicted from academic self-efficacy and perceptions of campus environment at community colleges in the state of Ohio.

This chapter reviews three bodies of research: (a) African American males and their academic achievement, (b) challenges faced by African American males in college, and (c) African American males’ academic self-efficacy and their perceptions of the campus environment. In addition, this chapter summarizes the theoretical framework that guided the study. The reviewed literature served as the framework to contextualize college self-efficacy, campus perceptions, and academic achievement of African American males in community college environments.

Research has clearly indicated that not all African American students are underachievers. Many defy the odds and succeed in K-12 environments, high school, and undergraduate higher education. The preliminary results of an ongoing study conducted by Lucky and Lucky (n.d) indicated that a number of variables contribute to the success of these students. Most of the students have a positive perception of themselves, are intrinsically motivated, cope well with stress, and have support from family and teachers.
They are confident in their academic abilities, and their peers rate their academic abilities high (Lucky & Lucky, n.d). However, research also has suggested that many African American males may be less academically prepared than their White counterparts (Cuyjet, 2006). Black students are not encouraged to achieve academically during their primary and secondary education, have the lowest high school grade point average (GPA) compared to other groups, and fail to finish high school at higher rates than any other population group (Bailey & Moore, 2004; Cuyjet, 2006; Strayhorn, 2008). As a result, those who make it to college often lack crucial requirements for success, including basic comprehension, reading skills, writing skills, and test-taking skills (Adelman, 2002).

Secondly, the challenges that African American males face are often insurmountable. This student population faces barriers related to K-12 schooling, community college, and higher education in general. Barriers can be classified as academic and non-academic in nature. African American males often lack access to the academic resources that many other students take for granted (Corrigan, 2003). Some of the non-academic barriers that African American males face include family circumstances, financial obligations, having dependents at home, and receiving less parental educational support (Corrigan, 2003; Swail, 2000). Attending college on a part-time basis also can act as a barrier to college completion, as can a demanding work schedule (Corrigan, 2003). In order to give them the best chance to successfully complete a college education and close the widening educational gap, the challenges facing African American males must be addressed early on in their educational careers (Swail, 2000).

Third, research related to academic self-efficacy and campus environmental perceptions of African American males indicates that students can be deeply encouraged
or discouraged by their family, school, and campus community environments. The influence of family, which begins at an early age, helps to determine students’ motivation to achieve academically and socially as well as the strategies students use to overcome challenges (Schunk & Meece, 2006). As students enter higher education settings, the campus environment, the curriculum, and modes of instruction become added influences over their overall environment (Schunk & Meece, 2006). Many African American males have to adjust to new environments and may feel isolated from their counterparts (Flowers & Pascarella, 2003; Hawkins, 1999).

**African American Males and Academic Achievement**

One of the most troubling problems in urban education is that Black children, particularly males, have been underserved by public schools. Black males have dropped out of school in unprecedented numbers and are more likely to be unemployed, addicted to drugs, and otherwise socially impaired than their White counterparts (Cuyjet, 2006). African American males have struggled to gain a positive self-image and identity in higher education and remain underrepresented. To no surprise, the negative image of Black males has done little to support their post-secondary education opportunities (Cuyjet, 2006).

Research has indicated that some racial identity components have a distinct relationship with African Americans’ social and educational outcomes. Higher race centrality is defined as the extent to which a person defines him/herself with regard to race, and it has been related to experiencing a more comfortable ethnic fit on campus (Chauvous, 2000) and higher academic performance (Sellers, Chauvous, & Cooke, 1998) for college students. Researchers increasingly have focused on racial identity, i.e., the
ways that individuals view themselves in relation to their group, as a way to understand how African American students interpret and respond to their social, academic, and other societal contexts. Racial identity can be viewed as individuals’ beliefs about the importance and meaning of race in their lives (Sellers, Smith, Shelton, Rowley, & Chauvous, 1998). This approach suggests there is a link between how individuals think about their racial group and their academic development. O’Connor (1997, 2000) also has indicated that the meaning that African American students construct about their own racial positioning and agency influences how these students perform academically.

Historically, African American males have found themselves excluded from the educational process because there has been no true representation of this group in the school curriculum (Garibaldi, 1992). Instead, the curriculum has reinforced the fact that African American males have been portrayed positively in limited areas, such as sports (Garibaldi, 1992). Black males have been retained at lower rates than the overall student population at community colleges in higher education. In an analysis of the 2000 U.S. Census and the Chronicle of Higher Education 2005 Almanac, Cuyjet (2006) found that although Black males represented 47.5% of the African American population in 2000, only 35.8% enrolled in college in 2002. Cross and Slater (2000) attributed the lack of African American male presence and success at institutions of higher education to several conditions that have prevented African American males from succeeding. The authors attributed the lack of African American male presence to the primary and secondary educational culture that favors African American girls over African American boys. These authors also indicated that many African American male role models are absent in
the homes of small boys, which contributes to the lack of persistence in higher education. Lastly, the media affects these males greatly (Cross & Slater, 2000).

According to Khumoestile and Pelonomi (2003), those African American males who do enroll in higher education institutions have experienced high attrition rates, and many do not complete their bachelor’s degree within six years. Their graduation rates have been declining for the last 20 years – from 35.3% in 2001 to 24.7% in 2003 (Khumoestile & Pelonomi, 2003). In addition to the race gap, the scholastic achievement gap between African American males and African American females also has not gone unnoticed. Studies have shown that African American women are twice as likely to earn their baccalaureate degrees compared to their African American male counterparts (Cuyjet, 2006).

African American males are often academically underprepared and unable to successfully integrate themselves into the social fabric of the college environment. Additionally, they are financially unable to contend with the rigorous demands of institutions of higher learning – all issues that may be reflected in institutionalized marginalization and racism (Lett & Wright, 2003). The campus environment is a critical component in the educational experience of the African American male population. Without support, there are additional challenges that may compromise their academic success, such as lower levels of involvement in clubs and organizations as well as fewer supportive relationships with faculty, administrators, and peers (Strayhorn, 2008). Additional challenges that may compromise their academic success include fewer academic support services they so desperately need and unwelcoming campus environments (Flowers, 2006; Swails, 2000). Under these circumstances, African
American males are less likely to become academically and socially integrated into college life, especially if they feel isolated. These factors have increased their chances of dropping out (Tinto, 1993). More than two-thirds of all African American males who enter college depart before earning their college degree – the lowest degree completion rate among all races and both sexes (U.S. Department of Education, 2010).

Achieving academically is a constant challenge for African American males. Academic achievement for this student population is influenced by a variety of factors in college and the larger society. Sowa, Thompson, and Bennett (1989) conducted a study on predictors of African American college students’ academic indicators, such as SAT scores and high school GPA, to determine whether these were accurate predictors of the college environment. These researchers found that neither traditional academic predictors nor some nontraditional measures can be used to accurately predict academic success (as measured by college GPA) of African American male students. The findings in this study suggest that although African American and White students enter college with similar or identical SAT scores, the cumulative GPAs of African American students were lower than their White counterparts after three years of college (Sowa et al., 1989; Steele, 1999).

**Challenges Facing African American Males in Community Colleges**

The issues surrounding African American male underachievement, particularly at community colleges, have tremendous consequences for the overall success of this student group. The low achievement rates of African American males can be traced to the challenges they have encountered in elementary and secondary educational settings. The
experiences that African American males encounter during their K-12 schooling can influence their behaviors and dispositions toward education (Noguera, 2003).

Considerable evidence suggests that early educational experiences of African American males have a profound influence on degree attainment and their long-term educational success (Davis, 2003; Noguera, 2003; Strayhorn, 2008; Swanson et al., 2003). Some researchers have suggested that issues regarding the participation and success of African American males in postsecondary education must be examined and understood as a “pipeline issue,” which involves tracking their transitions, experiences, and self-efficacy across the entire span of their educational career (elementary, secondary, and postsecondary) (Davis, 2003; Harris, 2009; Swanson et al., 2003). Swanson et al. (2003) have suggested that if African American males encounter negative educational experiences in elementary and secondary school, they are less likely to persist to the postsecondary level and be successful.

Currently, most racial subgroups have made significant progress in postsecondary enrollment in the United States (Strayhorn, 2008). However, the student demographics have changed tremendously in comparison to the more traditional student population in prior years in that they now include White, traditional-aged, and middle-class students. Historically, within underrepresented minority groups, female enrollment has increased more than male enrollment. For example, in 2007, a total of 56 African American males attended higher education for every 100 African American females (U.S. Department of Education [USDOE], 2007). However, in 2005, African American males who made the transition to higher education were less likely to complete a college degree than any other
student population (USDOE, 2005) because Black males have not attended college at the same rate as Black females.

Community colleges are the primary vehicle of entrance into higher education for African American males (Wellman, 2002). Higher education policies have legitimated community colleges and enabled them to serve as the entry point for disadvantaged students (Wellman, 2002). Community colleges do not exclude students on the basis of academic preparation, and the cost of attending a community college is significantly less than that of a four-year institution. With these factors in mind, many students have considered community college as a viable and realistic option for pursuing higher education (Piland & Wolf, 2003).

The Carnegie Classification groups community colleges into three categories: rural, urban, and suburban institutions (Carnegie Foundation, 2012). The Carnegie Classification also groups community colleges as small two-year, medium two-year, large two-year, and very large two-year institutions. A small two-year institution has a full-time enrollment (FTE) of 500-1,999 students; a medium two-year institution has an FTE of 2000-4,999 students; a large two-year institution has an FTE of 5,000-9,999, and a very large two-year institution has an FTE of at least 10,000 students (Carnegie Foundation, 2012).

Rural community colleges focus on serving students in rural geographic areas, while urban and suburban community colleges focus on serving students in urban and suburban geographic areas. Rural, urban, and suburban community colleges focus on mission, location, culture, and community constituencies (Eller, Martinez, Pace, Pavel, & Barnett, 1999; Rosenfeld, 2001; Valadez & Killacky, 1995). Referring to the rural
community college of the past as simply a “stepping stone to higher education,”
Rosenfeld (2001) highlighted the great number of two-year institutions that have shed
this reputation by expanding their missions to meet local economic needs (p. 2). In doing
so, rural community colleges have become multipurpose institutions that educate “from
post-high school through retirement, train for paid employment as well as hobbies,
catalyze improvements in their economies and communities, and attract arts and
entertainment” (Rosenfeld, 2012, p. 2). Often serving as “the only game in town for
economic development, cultural enrichment, and higher education... the concept of ‘all
things to all people’ is not only attainable but necessary for a rural community college”
(Cavan, 1995, p. 9).

Community colleges enroll almost half of all undergraduates in the United States
(Gardenhire-Croks et al., 2010). Low tuition rates and open access policies seem to be
contributing factors. While access to higher education has expanded, research has
suggested that a disproportionate number of African American male students neither
graduate from high school nor achieve a college degree (Hagedorn et al., 2001).
Community college students as a diverse group have reported various reasons for going
to a community college (Hagedorn et al., 2001).

reported that 42% of all first-year community college students are considered to be
academically under-prepared because they are required to enroll in at least one
developmental pre-collegiate course. A disproportionate number of African American
students have enrolled in pre-collegiate courses, which potentially has created a barrier
for them to continue their education. McClenney (2004) has reported that some students
never make it out of remedial education; only half go on to enroll in a four-year institution; and for students of color, particularly African American males, that figure is less than 20% (McClenney, 2004).

Wilson (2004) has reported that 85% of all community college students are employed and that more than 50% of them work full time. Being employed full time is an indication that students are at risk of not achieving their educational goals because (a) they do not have the same access to student support services and programs, (b) class offerings may not allow them to take the necessary classes to meet their requirements, and (c) they ultimately extend their enrollment at the college since they are limited in the number of classes they can take per term (Wilson, 2004). Additionally, nearly 30% of community college students are married and more than one-third have at least one dependent (Wilson, 2004). The responsibilities of work and family contribute to the risk of students not being academically successful and obtaining a lower self-efficacy toward higher education.

African American females also outperform their Black male counterparts. Studies have suggested that African American males take fewer notes in class, spend less time writing papers, participate in fewer activities on campus, hold fewer leadership positions on campus, and report lower grades than African American females (Cuyjet, 1997). These and other findings highlight the continuing widening gaps not only between African American males and African American females but also between African American males and their White counterparts in higher education access, college self-efficacy, and academic achievement.
The challenges mentioned in this section identify and describe barriers that most community college students face, including African American males. These challenges may also play a vital role in students’ social efficacy and engagement experiences within the college environment. In order to increase the academic and social efficacy of African American males, community college administrators must understand students’ experiences, including those of African American males, and the factors that impede their social and academic efficacy in the campus environment as well as their academic achievement.

**Academic Self-Efficacy and Campus Climate**

Bandura’s theory of self-efficacy postulates that human functioning is the result of interactions among cognitive, emotional, behavioral, and environmental factors (Schunk & Meece, 2006). Bandura (1997) has described self-efficacy as “the belief in one’s capabilities to organize and execute courses of action required to produce given attainments” (p. 3). Self-efficacy has been shown to predict diverse outcomes, such as social skills; pain tolerance; athletic performance; career choices; and, most importantly for this study, academic achievements (Schunk, 1991).

Self-efficacy beliefs work through cognitive, motivational, affective, and selective processes and influence how people feel, think, self-motivate, and behave (Bandura, 1997). Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment. Unlike self-concept, which generally refers to “the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence” (Purkey, 1988, p.2), self-efficacy is narrowly defined as being concerned with what individuals believe they
can do with whatever skills and abilities they may possess (Bong & Skaalvik, 2003). Unless people believe that their actions can produce the outcomes they desire, they have little incentive to act or persevere in the face of difficulties (Pajares, 2002). They tend to give up quickly, slack in their efforts, or engage in avoidance behavior (Bandura, 1994).

Self-efficacy literature has argued that when students believe in their ability to perform a task well, they will be more motivated, more persistent in the face of difficulty, more likely to use effective learning strategies, and more likely to have positive outcomes (Parajes, 1996; Zimmerman & Cleary, 2006). The capacity and willingness of individuals to develop and exercise self-regulatory skills, such as goal setting, time management, self-monitoring, and self-evaluation, are a reflection of their self-efficacy beliefs (Zimmerman & Cleary, 2006).

Self-efficacy beliefs are shaped by four main sources of influence. First, prior experience is the most powerful influence on individuals’ sense of efficacy. Prior successes strengthen self-efficacy; repeated failures weaken it, especially if the failures occur before a sense of efficacy has been firmly established (Bandura, 1994). However, some failure is necessary for the development of a resilient sense of efficacy. It is through setbacks and difficulties that people can learn the importance of persevering toward and ultimately achieving a successful outcome. Once a strong efficacy belief has been established, it is able to withstand temporary failures (Bandura, 1994; Bong & Skaalvik, 2003).

Secondly, self-efficacy is also built up by means of vicarious experiences involving similar others as social models. People’s self-efficacy beliefs are influenced very little by models that they perceive to be very different from themselves (Bandura,
Third, social and verbal persuasion from significant others who are viewed as knowledgeable and credible and who give information that is realistic also cultivate efficacy beliefs. Positive verbal persuasion works to encourage and empower individuals, but negative verbal persuasion defeats and weakens self-efficacy beliefs more easily than positive encouragement builds them up (Pajares, 2002). Also, experiencing personal failures easily negates self-efficacy beliefs that have been built up solely by positive verbal persuasion (Bong & Skaalvik, 2003). A fourth factor affecting people’s beliefs in their ability to perform is heightened physiological arousal. People use somatic and emotional reactions, such as sweating, rapid heartbeat, fatigue, aches, anxiety, and stress, to gauge confidence in their ability to successfully complete a given task (Bong & Skaalvik, 2003; Pajares, 2002).

Bandura (1977) studied human behavior in order to create his theory of perceived self-efficacy. An important insight into coping mechanisms comes from Majors and Billson’s 1992 research, which found that coping skills of African Americans may not be as advanced and proficient as others. Majors and Billson found that African American males interact in social environments, and these social environments could be seen as influencing self-worth, self-esteem, and self-efficacy. Many African American males have developed a defense mechanism referred to as cool posing (Majors & Billson, 1992). This phenomenon of cool posing refers to a behavior in which African American males often build a façade in which they disinvest and disengage with the environment in order to protect themselves from hurt and disappointment (Majors & Billson, 1992). However, African American males can develop coping skills if they struggle though situations that may be “intimidating” in nature. These skills are labeled by Bandura
(1997) as “efficacy expectations,” which can ultimately lead individuals to believe in their own natural abilities and to believe that they can succeed against the odds.

Academic self-efficacy is a subcategory of self-efficacy in general and can be defined as the confidence that students demonstrate in their ability to successfully perform a given academic task at a designated level (Bong & Skaalvik, 2003). There is a reciprocal relationship between students’ intelligence and abilities and their college self-efficacy. College self-efficacy is combined with social and academic self-efficacy. College self-efficacy is a concept that is comprised of several components of self-efficacy believed to be integral to college students. Specifically, college self-efficacy is comprised of self-efficacy for self-regulated learning and self-efficacy for academic achievement (Landry, 2003).

Self-efficacy growth is indirectly influenced by intelligence and ability. Academic self-efficacy develops in response to students’ interpretation of their knowledge and skills (Pajares, 2005). Self-efficacy beliefs help determine what students will do with their abilities. For example, Schunk and Meece (2006) have suggested that highly efficacious students will persist longer and do better in a subject area when compared to their peers who have low efficacy, even if their ability in that subject is low.

**Academic Self-Efficacy and Academic Achievement**

Self-efficacy plays a significant role in learning and achievement (Schunk & Meece, 2006). However, most research studies conducted on this topic usually have compared general, or global, self-concept with academic achievement (Pajares & Schunk, 2001). These studies have shown that students who have positive self-beliefs have a small yet significant academic advantage over those who demonstrate less favorable self-
beliefs. The results from Pajares and Schunk’s (2001) research further suggested that academic self-beliefs have a larger influence on levels of learning and school performance across time than do global or general beliefs and feelings about self (Pajares & Schunk, 2001). Studies have found that self-efficacy, in particular, has a greater effect on achievement than self-concept and self-esteem (Pietsch, Walker, & Chapman, 2003; Valentine et al., 2004). As students’ operational skills in performing a specific task increase, their self-efficacy for that task also increases (Lodewyk & Winne, 2005). Their level of self-efficacy beliefs influences whether they perceive academic work as a challenge or as a threat. In addition, highly successful students with high levels of self-efficacy tend to be more optimistic than their peers who are not as successful and lack self-efficacy. When students are faced with academic demands, they tend to appraise their coping resources rather than evaluate the demands (Chemars et al., 2001).

Caprara, Fida, Vecchione, Del Bove et al. (2008) studied 412 students ranging in age from 12 years to 22 years. These researchers found that students’ self-efficacy for self-regulated learning also positively correlated with academic achievement. The study further revealed that the relationship between perceived self-efficacy for self-regulated learning and academic achievement remains even stronger after researchers controlled for prior learning and socioeconomic status (Caprara et al., 2008). Students who believe in their ability to perform tasks use more cognitive and metacognitive learning strategies than students who do not. Pajares and Schunk (2001) suggested that there is a causal link between self-efficacy and students’ self-regulated behavior that results in academic achievement. Additionally, students who have little confidence in their capacity for self-regulated learning are less likely to use adaptive strategies and are more likely to give up
when faced with challenges (Usher & Pajares, 2008). Zimmerman (1995) found that academic self-efficacy influenced achievement directly by evoking change in the amount of effort expended and indirectly by raising students’ grade goals. Findings have suggested that students who believe they are capable of successfully performing academic tasks actually tend to perform better on those academic tasks, which include earning final grades as well as completing in-class assignments, quizzes, exams, essays, and reports (Pintrich & DeGroot, 1990). Pajares and Kranzler (1995) found that the direct effect of self-efficacy on academic performance was as strong as the effect of actual ability, which supports the idea that it is important to consider students’ perception of their ability to succeed in academia.

**Academic Self-Efficacy of African American Males**

When it comes to general issues of self-esteem, which can be defined as an individual’s perceived sense of worth (Schunk, 1991), and appraisals of attractiveness and popularity, African American students consistently score higher than their White peers. However, when dealing with issues of self-efficacy, these same students rate themselves lower than their White counterparts (Hare, 1987). Although race has not been a strong predictor of college performance, it has been found to influence self-efficacy among students of color (particularly African American males) with lower expectations of academic success (Hackett, Betz, Casas, and Rocha-Singh, 1992).

Okech and Harrington (2002) examined the relationship between Black consciousness and academic self-efficacy. Black consciousness was defined as the beliefs that individuals hold about themselves, their own race, and the White majority in relation to their Black experience. The authors found that African American males, who were
rated as having the highest level of Black consciousness, were found to have higher levels of academic self-efficacy than those reporting lower levels of Black consciousness (Okech & Harrington, 2002).

Mayo and Christenfeld (1999) indicated that through exposure to peers and professional role models, African American males might come to understand that they, as well as their cultural group, are not inferior to others. Numerous studies, however, have suggested that identity development and self-perception are important factors in the success of African American males because of early school experiences that may have played an important role in shaping their attitudes and perceptions about school in general. Masculinity, gender-role socialization, and negative stereotypes may impact the ability of African American males and their interest in learning in academic settings (Cunningham & Spencer, 2000). Coping strategies may help students to adjust within academic environments; however, it has been widely known that African American males have been found to develop resistance to employing these strategies, thereby possibly limiting their capacity to succeed academically and have higher college self-efficacy (Mayo & Christenfeld, 1999).

In their study measuring academic expectations of college students, Mayo and Christenfeld (1999) also found that regardless of academic ability, students of color believed that they would not perform as well as their White peers. Both groups (men and women of color) believed they would underperform and perform lower individually when compared to White students (Mayo & Christenfeld, 1999).

Some scholars further have suggested that masculinity plays a role in negatively affecting African American males’ disposition towards school and that their poor
academic performance is a function of their inability or disinterest in fulfilling their roles as learners in educational settings (Holland, 1991; Martin & Harris, 2006). Findings have suggested that African American males are not socially encouraged to achieve academic success. Holland (1991) has indicated that one primary reason for the alienation and poor academic performance of some African American males is that they perceive most schooling activities as irrelevant to their masculine identity and development (Davis, 2003). Based on his study of African American males, Steele (1992) has argued that African American males have an “academic disidentification” and exhibit lower levels of motivation to succeed. This study’s findings are important because of the significant positive correlation Steele found between self-efficacy and academic performance.

A concept known as “stereotype threat” was advanced by Claude M. Steele (1999) when he discovered that African American college students failed to perform as well as their White counterparts. Further, Steele proposed that negative stereotypes about the intellectual ability of African Americans may result in their academic underperformance because of their fear of confirming these negative stereotypes (Steele, 1992; Steele, 1997).

Over a period of time, “stereotype threat” can have long-lasting complications and cause academic disidentification (Steele, 1999). Steele (1999) has defined “stereotype threat” as a disconnection of self-esteem from academic performance. In other words, African American males protect their psyches by separating their view of themselves from academic situations that are painful and in which they receive degrading messages that are stereotypical in nature about their group’s expected performance ability (Steele, 1999).
Although the work of Fordham and Ogbu (1986) has been criticized by researchers such as Carol O’Conner (2001), it is important to recognize these authors’ emphasis on stereotype threat. Fordham and Ogbu found that many African American males did not strive to achieve success through their academic work because they anticipated from the beginning that there would be no benefit in them completing the academic undertaking. Arguably, observing African American males failing to receive the benefits of a degree is a disincentive for many other African American males to pursue higher education; many perceive they will have limited opportunities and succumb to a similar fate of not ever obtaining a degree (Fordham & Ogbu, 1986).

Fordham and Ogbu (1986) also stated that African Americans in general tend to discourage one another from succeeding academically because any positive involvement in education would be interpreted as a desire to assimilate into mainstream America. This perspective was identified as a major factor in deterring many African American males from achieving their academic goals (Ford, 1996). While Fordham’s study addressed one factor that may serve as a deterrent to African American male academic achievement in education, it does not account for the level of impact of college self-efficacy or environmental factors on the academic achievement of African American males.

There are critics of Fordham and Ogbu’s (1986) theory. Critics have pointed out that this theory does not account for the fact that some African American students compete favorably with White Americans both in terms of effort as well as educational outcomes (O’Conner, 2001). It also does not account for why African American women academically outperform African American men or why middle-class African American students outperform poor African American students. Further, this theory has failed to
account for within-group variation in achievement because it assumes that race unilaterally positions people in the social world (O’Conner, 2001).

Although some researchers have suggested that African Americans’ lower school achievement should not be attributed to lower levels of desire for success (Harris, 2006; Tyson, 2002), most researchers have agreed that lower academic achievement or performance is a product of negative school experiences, feelings of being marginalized, and campus perceptions that limit learning opportunities for African American males in educational settings (Davis, 1994; Davis, 2003). These studies also have suggested that gender and identity have a fundamental impact on the college self-efficacy of African American males.

**Campus Environment and Self-Efficacy**

A growing body of literature has indicated that campus environmental and educational experiences influence the educational outcomes of students (Fleming, 2001; Flowers, 2003; Soloranzo et al., 2000). The engagement of African American males in the campus social and academic environment has emerged as a critical area of investigation (Flowers, 2003).

Some scholars have argued that the most significant factor that positively impacts students’ academic and social outcomes in meaningful ways is student-faculty interaction (Dancy & Brown, 2008; Fleming, 2001; Flowers, 2003). Researchers have suggested that African American students are more likely to report greater interactions with faculty at historically Black colleges and universities (HBCUs) than at predominantly White institutions (PWIs) (Flowers, 2003). In addition, Dancey and Brown (2008) suggested that faculty-student interaction is critical to the creation of communities in college and
the improvement of collegiate perceptions of African American men. The networks and relationships that are formed in these communities function as channels for information about jobs and other opportunities (Brown & Davis, 2001).

Additionally, some scholars have reported that African American students experience feelings of isolation and alienation because of the insufficient pool of same-race faculty members and peers from which to observe potential role models (Fries-Britt, 2000; Strayhorn, 2008). Studies have thus linked supportive relationships with peers on campus to higher levels of satisfaction and self-efficacy in college for African American males (Harper, 2006; Strayhorn, 2008). Palmer and Gasman (2008) found that peer groups significantly influenced achievement among African American males. Participants in their study reported that their friends encouraged and motivated them to persist and to become academically successful (Palmer & Gasman, 2008). Another important factor in their study was access to role models and mentors. This access was found to be a significant contributor to a supportive campus environment for African American males and their academic success and self-efficacy. Many participants in the study described their university environment as helpful and caring as a result of the support, motivation, and encouragement that they received from peers, faculty, staff, and administrators (Palmer & Gasman, 2008).

On the other hand, some African American males have reported experiencing difficulty fitting in and that they have felt unwelcomed and socially isolated by their peers and faculty members (Strayhorn, 2008). Further, African American males find it difficult to develop a sense of belonging on campus (Strayhorn, 2008). Some scholars have attributed poor educational outcomes (retention, persistence, and degree attainment)
to African American males’ sense of belonging (or lack thereof) in college environments (Strayhorn, 2008). It is important to have safe places to express personal thoughts and feelings as well as to communicate information about important experiences (Dancey & Brown, 2008). Such places can be, for example, multicultural and ethnic centers, which facilitate “culturally affirming environments and experiences” for students of color, including African American males (Harper & Hurtado, 2007, p. 20). Supportive relationships with peers, faculty members, and staff members affirm a positive cultural learning environment and ultimately facilitate a sense of belonging and connection to the college campus for African American male students (Rendon, 1994; Strayhorn, 2008).

Of course there are African Americans who are academically and socially successful in higher education. Steward, Jackson, Sr., and Jackson (1990) found that these students tend to interact differently in the White environment than when in a majority African American environment. These students want to be more included and receive more affection in predominantly White college environments (Stewart et. al.). The authors found that the students in the study believed that their interaction in predominantly White college environments would help them achieve academic success in college.

According to Love (1993), although most retention programs and strategies are aimed at correcting or changing African American students’ attitudes and beliefs towards education, these strategies fail to address the campus environment factors and campus climate factors that are involved (Harvey-Smith, 2002). Even though most studies that explore the academic achievement of African Americans in higher education examine pre-college indicators as a method of predicting academic success (Davis, 1994; Johnson,
1993; Hagedorn et al., 2001), Carroll’s (1988) study of freshman students in a predominately African American, urban community college setting revealed that institutional factors play an important role in determining the success of African American students.

In addition, Nettles, Thoeny, and Gosman (1986) compared student performance in college among African American and White students and determined that student environment is a primary factor influencing academic performance. In this study, the campus environment was measured by the quality of the college experience, and the findings suggested that positive college experiences contribute to higher college efficacy and higher grade point averages. This study also concluded that observed interactions between race and student satisfaction, and peer relations and interfering problems, demonstrate the need for greater sensitivity on the part of colleges and universities to the particular needs of African American students (Nettles et al., 1986), specifically African American males.

Nora and Cabrera (1996) studied student college experiences that relate to their affective and cognitive development. The student adjustment model proposes that the experiences of students are reflected in two domains: (a) a social domain encompassing experiences with other students and faculty (but of an informal nature) and (b) an academic domain reflecting experiences with faculty, other students (but of an academic nature), and academic staff members. These experiences have been found to enhance the affective and cognitive development of students. Nora and Cabrera’s model suggests that students undergo academic and intellectual development and become more involved in a healthy socialization process in a welcoming campus environment, feel more committed
to attaining a college degree, and develop a sense of belonging at and commitment to their institutions.

The model further suggests that students’ precollege academic ability directly influences their academic performance as well as their motivation to engage in college work (Tinto, 1993). Both Nora and Cabrera (1996) and Tinto (1993) have confirmed the importance of a campus environment that is conducive to academic success. Nora and Cabrera’s model further presupposes that academic and social experiences are interdependent. Support for this interrelationship also has been provided by Stage (1989); Cabrera, Casteneda, Nora, and Hengstler (1992); and Cabrera, Nora, and Casteneda (1993).

Reoccurring themes exist in the literature related to the perceptions that African American males have about their college experience. Research has suggested that institutions are making a concerted effort to remove institutional barriers and challenges that impede African American males and to create and maintain supportive academic climates (Nettles, 1988; Townsend, 1994) as well as supportive social environments (Pascarella & Terenzini, 1991). Campus climate and institutional environment are referenced often within scholarly literature as significant contributors to the challenges that are experienced by students of color in higher education settings (Greene, 2005). Numerous studies on campus climate have concluded that a lack of cultural and social support, perceived prejudice, and discrimination are associated negatively with minority self-efficacy and retention (Greene, 2005). Tinto (1987) has stated that these adverse conditions make it difficult for African American students to feel comfortable and included in collegiate academic environments.
At the same time, other studies have reported positive relationships between racial environment on college campuses and academic performance (Allen, 1988; Nettles et al., 1988). Based on the literature regarding campus climates, it is evident that students of color, particularly African American males, will be more actively engaged in their education and gain more from their experiences when they attend institutions that they perceive to be inclusive and that affirm them as students (Laird et al., 2007). All of these external factors are interrelated and contribute to the self-efficacy of African American students, particularly African American males at community colleges. These factors relate to the campus climate and how well students adjust to the college environment.

Environments that are supportive are important because learning occurs best when students, particularly African American males, are in environments in which they feel connected, cared for, and trusted (Kezar et al., 2001; McClenney & Marti, 2006). Fostering positive relationships among students, peers, and faculty promotes a positive educational environment for African American males. These positive relationships have the potential to increase self-efficacy and academic achievement among African American males (Bonner & Bailey, 2006).

In summary, research has supported the notion that perceived levels of college self-efficacy can influence academic performance (Okech & Harrington, 2002). People with high levels of academic and college self-efficacy tend to pursue goals that are more challenging and seek innovative solutions that help them persevere through difficult tasks in order to perform to the best of their ability (Okech & Harrington, 2002). Tuckman and Sexton (1992) indicated that such efforts are likely to lead individuals to the expansion of actual ability and subsequent goal achievement. Such exploration suggests that in order to
increase the academic and college self-efficacy of African American students, particularly African American males, variables related to the campus climate and environment must be considered.

**Theoretical Framework**

The theoretical framework that guided this study was closely aligned with the instruments that were used in this study. This study was guided by research on academic self-efficacy and campus environment through the work of Zimmerman (2005), Schunk and Meece (2006), and Nora and Cabrera (1996). Zimmerman has confirmed the importance of academic self-efficacy and found that academic self-efficacy influenced achievement (a) directly by evoking change in the amount of effort expanded and (b) indirectly by raising students’ grade goals. Findings have suggested that students who believe that they are capable of successfully performing academically-related tasks tend to perform better academically, which includes earning higher overall course grades as well as successfully completing in-class assignments, quizzes, exams, essays, and reports (Pintrich & DeGroot, 1990). Pajares and Kranzler (1994) found that the direct effect of self-efficacy on academic performance was as strong as the effect of actual ability, which emphasizes the importance of considering the students’ perception of their ability to succeed in academia.

Schunk and Meece (2006) examined the relationship between (a) self-efficacy and social and academic motivation (effort and persistence) and (b) achievement. Schunk (1995) stated that among students of different ages, significant and positive correlations have been obtained between self-efficacy for learning and subsequent motivation during learning, such as post-instruction and skillful performance (Schunk, 1995). Some
instructional conditions that have been shown to impact self-efficacy among adolescents were proximal and specific learning goals, instruction on learning strategies, social models, performance and feedback indicating progress, and rewards contingent upon improvement (Schunk, 1995). These processes affect self-efficacy and motivation through the common mechanisms of informing students of their progress in learning (Schunk, 1995). Self-efficacy is related to social integration and is also an important determinant in educational outcomes (Solberg et al., 1993).

The last work that guided this study is Nora and Cabrera’s student adjustment model (1996). While all students experience transition issues when they begin college, students of color, particularly African American males, can face a difficult transition when starting college. Nora and Cabrera (1996) studied issues of transition that minority students face by using a questionnaire to measure the adjustment process. The student adjustment model (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999) traces the experiences of minority students’ transition in two domains: (a) the academic domain, which reflects experiences with faculty, other students (but of a formal nature), and academic staff, and (b) the social domain, encompassing experiences with other students and faculty (but of an informal nature). The personal-emotional aspect refers to the degree to which students experience stress during the adjustment process. Attachment refers to the degree of commitment to educational goals and level of satisfaction with the institution. These experiences may have a substantial impact on the overall adjustment process and enhance cognitive and affective development (Baker & Siryk, 1999; Cabrera, et al., 1999).
Summary of the Literature

Three bodies of literature were reviewed: (a) African American males and their academic achievement, (b) the barriers that African American males face, and (c) the academic self-efficacy and perceptions of the campus environment and climate by African American males. This literature contextualizes the analysis of the college self-efficacy of African American males at community colleges in Ohio and the analysis of the relationship between their perceptions of the campus environment and their academic achievement. The literature suggested a strong relationship between academic self-efficacy, campus environment, and academic achievement in general. Internal and external factors impacted African American males’ achievement in community college environments. When educational environments are supportive, academic success can be achieved, and higher self-efficacy can be attained (Kezar, 2006).
Chapter Three

Research Design and Methodology

The purpose of this study was (a) to provide an analysis of the levels of college self-efficacy and of the campus environmental perceptions of African American males at rural, urban, and suburban two-year community colleges in the state of Ohio and (b) to determine whether there was a statistically significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges (rural, urban, and suburban) in Ohio. Further, the study examined whether academic achievement could be predicted from academic self-efficacy and campus environmental perceptions at community colleges in the state of Ohio.

Research Questions

This research study was guided by the following research questions:

1. What is the level of college self-efficacy among African American males in two-year community colleges?
2. How do African American males in two-year community colleges perceive their campus climate/environment?
3. Among African American males in two-year community colleges, is there a significant relationship among college self-efficacy and campus environmental factors?
4. Can academic achievement of African American males in two-year community colleges be predicted by college self-efficacy and/or campus environmental factors?
5. What is the effect of college self-efficacy on the relationship between campus climate and academic achievement?

This chapter addresses the quantitative data collection and data analysis methods that were employed for this study. A survey instrument was designed for this study to collect quantitative data that measures African American males’ college self-efficacy and campus environmental perceptions at community colleges in the state of Ohio.

The study used a non-experimental quantitative survey research design to explore the possible relationships among academic achievement, college self-efficacy, and campus environmental perceptions of African American males at two-year community colleges in the state of Ohio. A survey research design was an appropriate tool for assessing the college self-efficacy, campus environmental perceptions, and academic achievement of African American males in community colleges. According to Dillman (1978), surveys are ideally suited to the collection of descriptive and inferential data. The survey research design provides descriptive statistics (mean, median, mode, and standard deviation) that help identify and examine trends. The Pearson product-moment correlation coefficient (Pearson’s r) was used to examine the strength and direction of the bivariate relationships and to compute the correlational values (Statsoft, 2007; Trochim, 2006). Multiple regression analysis was used to determine the degree to which the independent variables (i.e., college self-efficacy and campus environmental perceptions) predict the dependent variables (i.e., academic performance) (as measured by self-reported grade point averages). A survey design and two-way ANOVA procedure offered a greater degree of insight into how the variables influenced each other as well as how
college self-efficacy and campus environmental perceptions jointly influenced the academic achievement level of African American male students.

**Variables**

Data was collected for three different variables: (a) the self-reported value of college self-efficacy, (b) campus environmental perceptions, and (c) self-reported GPA. The independent variables included college self-efficacy and campus environmental perceptions. The self-reported values of college self-efficacy were used as an independent variable in this study. Two values were collected using Solberg’s College Self-Efficacy Instrument. Solberg measured college self-efficacy using two scales: (a) course efficacy and (b) social efficacy. The instrument used a Likert-type response scale. Campus environmental perceptions were also used as an independent variable in this study. Campus environmental perceptions were measured using two instruments: (a) Gloria and Kurpius’ (1996) University Environment Scale (UES) and (b) Nora and Cabrera’s Student Adjustment Model. According to Nora and Cabrera’s (1996) Student Adjustment Model, a student’s college experience is measured in two domains: social and academic. Each variable was measured using a modified version of scales on these instruments. Finally, the dependent variable utilized in this study was self-reported grade point average (GPA). Demographic data were also collected.

**Site Selection**

Three out of 23 community colleges in the state of Ohio were selected as sites for research. Ohio was selected because of its extensive community college system. Two main criteria guided the selection of the three community colleges. First, one community college was chosen to represent each of the three groups based on the Carnegie
Classification: (a) public rural community college, (b) public urban community college, and (c) public suburban community college. Secondly, the distribution by race and ethnicity at each of the community colleges in the state of Ohio was examined. The three community colleges that were chosen were comprised of 18% (rural), 33% (urban), and 14% (suburban) African American males. The researcher selected the colleges with the highest proportion of African American males to participate in the study. According to the Student Diversity Report (2010), the highest percentage of African American students in any community college was 33% (Ohio Board of Regents, 2012).

The Carnegie Classification defines rural-serving community colleges as institutions located in areas with a total population of less than 500,000. Put another way, institutions not located in metropolitan areas are classified as rural-serving (Carnegie Foundation for the Advancement of Teaching, 2012). Urban-serving and suburban-serving institutions are physically located within areas that have populations exceeding 500,000 people, according to the 2000 Census. These institutions are located in primarily metropolitan areas (Carnegie Foundation for the Advancement of Teaching, 2012).

The population under investigation for this study consisted of African American males attending two-year community colleges, and the sample participants were required to meet the following criteria: (a) have attended at least one semester of college in order to have a grade point average (GPA) to report, and (b) were currently enrolled in a community college in the state of Ohio. These criteria helped to ensure access to the greatest number of African American males for the study, therefore allowing the researcher to make inferences about the entire population of interest—in this case, African American males at community colleges in Ohio.
The public rural-serving community college selected for this research study, which is referred to as “College A,” had an African American enrollment of 18%, which includes males and females, and was located in the northeastern region of Ohio. The public urban-serving community college for this research study, which is referred to as “College B,” had an African American enrollment of 33%, which includes males and females, and was located in the northeastern region of Ohio. The suburban-serving community college for this research study, which is referred to as “College C,” had an African American enrollment of 14%, which includes males and females, and was located in the northwestern region of Ohio. While College C has a mailing address that is located in an urban city, the physical location of the campus is situated in a suburban setting.

Respondents

The respondents for this study were African American males enrolled in a community college (i.e., College A, College B, or College C). The researcher targeted key administrative personnel with oversight of programs that include high numbers of African American males at each community college so that the survey could be sent to as many African American males enrolled for the fall 2012 term. The researcher gained access to all of the African American males enrolled for the current semester at College A, College B, and College C to increase the response rate for the study. In College A, the African American male student enrollment was 7%. College B had an African American male student enrollment of 11%, and College C had an African American male student enrollment of 6%. The researcher reached as many of those individuals as possible.
Site Access and Field Procedures

The researcher initiated introductory phone calls and electronic communication with senior-level student and academic affairs administrators at College A, College B, and College C and summarized the purpose and significance of the research, the research questions, and the survey procedures. The researcher extended an invitation to participate to each of the colleges in the study. Subsequently, the researcher identified an administrator, faculty, or staff member at each institution to serve as a liaison between the researcher and the participants. The liaison helped to distribute the survey, collect responses, and facilitate visits that the researcher made to the colleges. The student email addresses were generated by the liaison at each of the participating research sites, and an email was sent only to African American male students at each college, and the email included a website link to the survey.

IRB approval was granted for the study. Participants were sent an email and electronic survey link from the liaison on behalf of the researcher in an online survey research format using the Qualtrics software, a Web-based survey software selected by The University of Toledo as the institutional preference for electronic Web-based surveys. Each student was provided access to the link that is securely housed on the Qualtrics.com website. The database collected students’ responses to the surveys securely and anonymously. Qualtrics is an online software that provides a platform for building and modifying survey instruments. This online tool provided easy access to survey participants’ responses and allowed the researcher to manage and analyze the survey data. This software allowed the researcher to manage the student responses from each college and stored responses as an aggregate. For purposes of this research study, College
A, College B, and College C were each provided a separate Web link to maintain privacy and confidentiality of questionnaire responses. The researcher chose this software because of its ability to securely collect, analyze, and store data in a password-protected database.

Using an electronic questionnaire helped to increase the sample size, and using a liaison helped increase participants’ trust (and therefore willingness to participate) because the instrument was coming from an individual at the institution that students attended and with which they were familiar. The questionnaire was ready to be administered by mid October 2012. All students were contacted by the designated campus liaison via electronic mail that included an invitation to participate in this survey research. The questionnaire required between 15 and 20 minutes to complete. The Qualtrics survey link was included in the electronic message. The questionnaire remained open for three weeks after contact was initiated with the participants. A reminder email was sent to all designated campus liaisons once a week after the initial email was sent for a total of three weeks. The questionnaire was sent a second time to students on the list from College A, College B, and College C just in case they did not receive the first email or lost the Web link. It remained open for two-weeks the second time. The researcher was open to conducting follow-up site visits, if necessary, to all three community colleges if response rates were low; however, the researcher did not have to conduct any site visits since the response rates were acceptable. No identifying information about participants and their responses was given to the researcher in order to protect the identity of the respondents. The contact information of the investigator was provided to the participants in case they were interested in the results of the study.
**Instrumentation**

Data was collected through a questionnaire instrument. There were four sections in the questionnaire: Section I collected data that comprised the independent variables related to college self-efficacy. Section II contained items that elicited information related to the second set of independent variables—i.e., campus environmental perceptions. Section III collected data on academics, which included questions about course load, full-time status, online courses, GPA for the most recent academic term, and the expected GPA for the current term. Students provided their self-reported GPA (dependent variable) on an interval scale. Section IV collected demographic information about the participants. This data included age, gender, race, and ethnicity (see Appendix B). The theoretical underpinnings of this research scale are related to the persistence of Chicano students in institutions of higher education (Gloria & Robinson Kurpius, 1996).

**Section I of the Questionnaire**

The College Self-Efficacy Inventory (CSEI) was developed by Solberg (1993), and permission was requested and granted to the researcher to administer the questionnaire to African American males at community colleges in Ohio. This questionnaire was designed for four-year colleges and universities but was adapted for the purposes of this research study to survey community college students. The CSEI was constructed to address college-related issues common to all students, and the original survey instrument consisted of three subscales: Course Efficacy, Roommate Efficacy, and Social Efficacy (Solberg, 1993). For the purposes of this research study, the researcher omitted the Roommate Efficacy subscale and used only the Course Efficacy subscale and
the Social Efficacy subscale because the study was conducted at community colleges that do not have residential facilities.

The questionnaire collected data about college self-efficacy as measured by the College Self- Efficacy Instrument (CSEI) (Solberg et al., 1993). The degree to which Black male students believed they were able to succeed in academic related tasks at the college level was measured using the Course Efficacy subscale and the Social Efficacy subscale. Course Efficacy examines students’ perception of their ability as it relates to classroom work, such as researching a term paper and understanding the textbook in class. The second subscale for this research study measured participants’ social efficacy, which was used to identify the degree to which students felt they were able to engage successfully in social activities inside and outside the classroom, such as participating in student organizations or asking a professor a question (Solberg et al., 1993).

The CSEI instrument tests the degree to which theoretically derived constructs predict college outcomes (Torres & Solberg, 2001). Educators can design college experiences so that they increase self-efficacy by helping students manage stress, manage their time, and increase their social integration with faculty members (Solberg et al., 1998).

Zimmerman (1995) suggested that students who believe that they are capable of successfully performing academically related tasks tend to perform better academically—e.g., earning higher final grades and performing better on in-class assignments, quizzes, exams, essays, and reports (Pintrich & DeGroot, 1990). Schunk and Meece (2006) suggested that students are motivated to overcome challenges as they adjust to new campus environments.
The original CSEI consisted of 19 items, with 7 items relating to course-efficacy, 4 items relating to roommate efficacy, and 8 items relating to social efficacy. The adapted version used in this research study consisted of 15 items (7 items for course efficacy and 8 items for social efficacy). The roommate efficacy subscale was eliminated from this study since this component is not applicable to community colleges. The CSEI is a self-report measure in which students responded to the following statement: “How confident are you that you could successfully complete the following tasks:…” Participants were asked to rate their efficacy using a seven-point Likert-type scale ranging from (1) not confident at all to (7) complete confidence. A total sum score was computed across both subscales, with higher scores indicating an increased sense of ability to succeed at college-related tasks. In addition, scores were summed for each subscale, with higher scores indicating an increased sense of efficacy in completing academic work and engaging in social activities. In the original instrument, Solberg et al. (1993) reported an alpha coefficient of .93 for the total CSEI, and .88 for each of the subscales respectively. The original instrument was tested for reliability and validity. Both were high.

**Section II of the Questionnaire**

The University Environment Scale (UES) was developed by Gloria and Robinson Kurpius (1996), and permission was requested and granted to the researcher to utilize the questionnaire to survey African American males at community colleges in Ohio. The original survey was designed for four-year colleges and universities but was adapted for the purposes of this research study to survey community college students.

The questionnaire also collected data comprised of participants’ perceptions about the campus environment and campus climate. The UES examines students’ perceptions
of the university setting along a continuum ranging from (a) unfriendly and insensitive to (b) welcoming and engaging. The instrument theoretically aligns with Nora and Cabrera’s (1996) work and connects to the social and academic domains within their Student Adjustment Model. The model identifies the importance of a welcoming campus environment in establishing students’ sense of commitment to their institutions (Nora & Cabrera, 1996). With permission from the original authors, the researcher changed the name of the survey instrument from The University Environment Scale (UES) to the Community College Environment Scale (CCES) to reflect the emphasis this study placed on the community college environment. The CCES consisted of 14 items that ask participants to indicate their perceptions of their college by responding on a seven-point Likert-type scale ranging from (1) not at all to (7) very true to each of the 14 assertions about the college setting. Sample items from the UES include the following: “The college encourages/sponsors ethnic groups on campus” and “Financial aid staff have been willing to help me with financial aid concerns.” Scores from the survey were calculated by summing across the 14 items, where higher scores indicated a more positive perception of the college’s environment. The original survey, the UES, was piloted by Gloria and Robinson Kurpius (1996) with undergraduate students of color from two major universities. The consistency for both universities ranged from .81 to .85, with a reported Cronbach’s alpha of .84. The original instrument was tested for reliability and validity and both were high.

Data Management

Once the data collection phase had been completed, the researcher checked to make sure all surveys were complete. Any survey that included incomplete information
was excluded from the data pool. The completed data were entered into SPSS for review and analysis. The variables in the study (college self-efficacy, campus environmental perceptions, and academic achievement) were manually labeled within SPSS, and responses were automatically coded during the data analysis process.

**Data Analysis**

SPSS 15.0 was utilized to conduct all quantitative data analyses. Data analyses were conducted in three phases. First, descriptive statistics were calculated for African American males’ self-reported college self-efficacy, campus climate and environmental perceptions, and academic achievement. Further, correlational analyses were conducted to determine whether a statistically significant relationship existed among these variables. A correlational research method quantifies the strength of the relationship between two or more variables (Graziano & Raulin, 2000). Correlational research can be used for prediction, yet the correlations do not establish causation (Graziano & Raulin, 2000). Correlational research design is often included in larger research studies to provide data that might help the researcher interpret the primary findings of the study (Graziano & Raulin, 2000). Lastly, multiple regression analysis was used to determine whether academic achievement could be predicted from two or more variables in this study.

**Assumptions and Limitations**

There were two imbedded assumptions in this research linked to one of the theories informing this study. First, a basic tenet of Bandura’s theory of self-efficacy is that behavior is dynamic and a consequence of continuous, reciprocal interaction between an individual’s psychological processes, past behaviors, and current environment. Pajares (2002) further noted that people have the capability of learning through observation, self-
regulating, and performing behaviors. A second assumption was that all participants would answer the questions honestly and accurately and that they would read and understand the questionnaire directions.

The study was subject to six limitations. First, since the sample included participants from only three community colleges, the findings may not be applicable to all community colleges in Ohio. Secondly, participation in this study was voluntary. According to Onwuegbuzie (2000), all quantitative research is subject to limitations from methodological threats to internal and external validity. Internal validity helps determine whether the intervention caused the outcome and takes into account whether some other extraneous variable could have caused it. Third, for this research, two methodological limitations to validity were recognized: (a) the inability to infer causality because the nature of the study and (b) chance findings because the variables might correlate significantly with each other by chance (Onwuegbuzie, 2000).

Fourth, non-response error can serve as a limitation. Challenges can possibly occur for students using an electronic survey versus the paper survey, resulting in students experiencing problems with navigation or deciding not to respond. Cui (2003) stated, “No matter how carefully a sample is selected, some members of the sample simply do not respond to the survey questions” (p. 2). In addition, Slavin (2007) noted that “sending surveys by mail or email is very inexpensive, but also suffers from low response rates and many may not give the depth of responses possible as face-to-face and telephone surveys” (p. 106).

Fifth, selecting the state of Ohio for this research study serves as a limitation to this study because the researcher has professional connections in other colleges in Ohio.
According to Slavin (2007), it is important to minimize non-response error. At the time that the data were collected, the researcher was employed at a community college in Ohio and had optimal access to a substantial number of potential respondents for the study. The researcher also was affiliated with a network of colleagues who worked at other community colleges in Ohio.

Every sample contains some sampling error. In quantitative research, generally this limitation is corrected by increasing the sample size. The larger the sample size, the greater the confidence that the observed correlation is not just a matter of chance (Lowry, 1999). However, there is a point at which increasing the size of the sample no longer provides this benefit and is generally considered wasteful (Statsoft, 2007). A rule of thumb is that a sample size of more than 100 participants eliminates most concern about biases and normality assumptions (Statsoft, 2007). This guidance is generally employed by researchers conducting correlation and regression studies (Zajacova et al., 2005).

Finally, bias served as a limitation to the study because students who were interested in the topic were more likely respond to the questionnaire positively or negatively. This serves as a bias because the research findings may not be representative of the entire Black male population at other community colleges. By design of the study, some members of the Black male population were not included in the sample; therefore, some members of the population had no chance at being selected into the sample.

**Delimitations**

The researcher identified three important delimitations for this study. First, the researcher examined the responses of Black male students in community colleges located only in the state of Ohio. To manage the scope of the study, the researcher did not include
Black female students or individuals from other states in this study. Secondly, the study was delimited only to two-year institutions, thus excluding four-year institutions. Lastly, the study was delimited only to Black males at community colleges.
Chapter Four

Results

The purpose of this study was (a) to provide an analysis of the levels of college self-efficacy and of the campus environmental perceptions of African American males at rural, urban, and suburban two-year community colleges in the state of Ohio and (b) to determine whether there was a statistically significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges (rural, urban, and suburban) in Ohio. Further, the study examined whether academic achievement could be predicted from academic self-efficacy and campus environmental perceptions at community colleges in the state of Ohio.

The study was directed by five research questions:

1. What is the level of college self-efficacy among African American males in two-year community colleges?

2. How do African American males in two-year community colleges perceive their campus climate/environment?

3. Among African American males in two-year community colleges, is there a significant relationship among college self-efficacy and campus environmental factors?

4. Can academic achievement of African American males in two-year community colleges be predicted by college self-efficacy and/or campus environmental factors?

5. What is the effect of college self-efficacy on the relationship between campus climate and academic achievement?
This chapter presents the findings of the study along with results related to each of the five research questions. Research Question 1 and Research Question 2 were investigated using descriptive statistical analysis to describe African American males’ college self-efficacy as well as their perceptions of the campus climate. Descriptive statistics were used to describe data in terms of measures of central tendency and to summarize data sets both of the sample and the population (Fink, 1995). Research Question 3 was investigated by using a correlational analysis to determine whether a relationship exists among college self-efficacy and African American males’ perceptions of campus environmental factors. Correlational analysis evaluates the strength of relationships between variables or the extent of association between and among variables (Fink, 1995). The independent variables in this study are college self-efficacy and perceptions of campus environmental factors. The remaining two research questions were investigated using multiple regression analysis (a) to determine whether academic achievement could be predicted by college self-efficacy and/or campus environmental factors and (b) to determine the effect of college self-efficacy on the relationship between perceptions of campus environmental factors and academic achievement by African American males in community colleges. Multiple regression analysis was used to test both main effects and the interaction effect. According to Fink (1995), multiple regression analysis is a statistical technique that predicts values of one variable on the basis of two or more other variables. In this case, academic achievement was the dependent variable (outcome variable), and college self-efficacy and campus environment were the independent variables (predictor variables). Interaction effects represent the combined effects of variables on the criterion or dependent variable in this
study. When an interaction effect is present, the impact of one variable depends on the level of the other variable (Fink, 1995).

In this study, multiple regression analysis was used to investigate variables that potentially predict academic achievement. Regression analysis also was used to explore the interaction between college self-efficacy and college environment and the potential influence that these two variables have on GPA. The regression analysis investigated whether academic achievement (GPA) of African American males in two-year community colleges was predicted by (1) college self-efficacy and (2) campus environment. A stepwise regression tested whether each predictor variable separately accounted for change in GPA (main effect) as well as whether the interaction of the predictor variables accounted for change in GPA (possibility of moderator effect); however, the specific variable in the study that might possibly be a moderator was not predicted. The moderator effect was not centered and will be addressed further in this chapter.

In summary, the analysis revealed that college self-efficacy was a significant predictor of GPA scores and accounted for 11% of the variance of campus environment’s influence on GPA. In addition, no interaction effect (no moderator effect) was identified because one variable did not depend on the other variable to obtain the change in GPA. This interaction effect was not statistically significant.

**Findings**

On behalf of the researcher, the institutional research office coordinators at each community college emailed a questionnaire to list serves of African American males. The participants were sent an email asking them to participate in the study through an
electronic survey link that directed them to the questionnaire. Each college was directed to a separate URL link so the responses from each college could be tracked. The survey was administered in an electronic, web-based format and distributed to African American males at three different types of community colleges (rural, urban, and suburban) in Ohio. The lists of African American male students were obtained by each community college’s institutional research department and included all African American male students who were enrolled in the fall term of 2012 at each respective community college in the sample. The survey was administered during the period of October 2012 through December 2012. During that time frame, two reminders were sent to College A, three reminders were sent to College B, and two reminders were sent to College C to ensure acceptable response rates from the participants at each college. The reminders were sent within two weeks of each other.

A total of 272 responses were collected and recorded by the researcher using Qualtrics, an online survey research software product. A total of 42 responses were collected from College A, 114 responses were collected from College B, and 116 responses were collected from College C. Of the 272 survey responses that were collected, 51 surveys were discarded due to incomplete data (i.e., 8 from College A, 22 from College B, and 21 from College C). In several instances, it appeared that the participant had completed most of the first page of the questionnaire and then discontinued the questionnaire. In these instances, information would have remained on college self-efficacy but not on college environment; GPA, which is the dependent variable; or demographics. Therefore, the researcher decided to eliminate those responses from the sample. Additionally, 10 additional responses were discarded because the
respondents were not African American males (i.e., 0 from College A, 6 from College B, and 4 from College C). There were no duplicate responses that the researcher could detect. After omitting the incomplete responses, 211 responses from African American males were included in the data analysis.

As measured by race and ethnicity at each of the community colleges, of the 211 participants, participants from the rural community college (College A) accounted for 16% of the sample, participants from the urban community college (College B) accounted for 41% of the sample, and participants from the suburban community college (College C) accounted for 43% of the sample. See Figure 1.

![Figure 1. Proportion of responses from each college in the final sample.](image)

Table 1 summarizes the number of responses by college. For College A, out of 992 African American males that received the electronic questionnaire, 34 surveys were returned to the researcher, which results in a response rate of 3.4%. For College B, out of 3,080 African American males that received the electronic questionnaire, 86 surveys were returned to the researcher, which results in a response rate of 2.8%. Lastly, for College C, out of 1,002 African American males that received the electronic
questionnaire, 91 surveys were returned to the researcher, which results in a response rate of 9.1%.

Table 1

(Response Count, by College)

<table>
<thead>
<tr>
<th></th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants in Final Sample</td>
<td>34</td>
<td>86</td>
<td>91</td>
</tr>
<tr>
<td>Total Number of African American Males</td>
<td>992</td>
<td>3080</td>
<td>1002</td>
</tr>
<tr>
<td>Response Rate</td>
<td>3.4%</td>
<td>2.8%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

To determine whether the response rate from each community college was consistent from college to college, a chi-square analysis was conducted on one of the independent variables: the Carnegie Classification variable. A chi-square analysis is based on a test statistic that measures the divergence of the observed data from the values that would be expected under the null hypothesis of no association (Fink, 1995). The results (shown in Figure 1) revealed that the response rate from each community college actually differed, \( \chi^2(2) = 68.23, p < .001 \). In this case, the results were statistically significant, indicating that there was a real difference in the response rate across the three community colleges. Based on the percentages of responses from each college, students from College C were more likely to respond to the survey than students from either of the other two community colleges (College A and College B). In other words, the response rate from College C was slightly higher than expected.

Tables 2 through 6 summarize the characteristics of the participants who comprised the sample.
Table 2

<table>
<thead>
<tr>
<th>Frequency (%) of Participants’ Ages</th>
<th>Entire Sample (n = 211)</th>
<th>College A (n = 34)</th>
<th>College B (n = 86)</th>
<th>College C (n = 91)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18</td>
<td>5 (2.4%)</td>
<td>2 (5.9%)</td>
<td>7 (8.1%)</td>
<td>5 (5.5%)</td>
</tr>
<tr>
<td>18-19</td>
<td>38 (18.0%)</td>
<td>4 (11.8%)</td>
<td>4 (4.7%)</td>
<td>29 (31.9%)</td>
</tr>
<tr>
<td>20-21</td>
<td>22 (10.4%)</td>
<td>2 (5.9%)</td>
<td>2 (2.3%)</td>
<td>14 (15.4%)</td>
</tr>
<tr>
<td>22-24</td>
<td>9 (4.3%)</td>
<td>3 (8.8%)</td>
<td>4 (4.7%)</td>
<td>5 (5.5%)</td>
</tr>
<tr>
<td>25-29</td>
<td>12 (5.7%)</td>
<td>4 (11.8%)</td>
<td>10 (11.6%)</td>
<td>5 (5.5%)</td>
</tr>
<tr>
<td>30-34</td>
<td>23 (10.9%)</td>
<td>3 (8.8%)</td>
<td>11 (12.8%)</td>
<td>9 (9.9%)</td>
</tr>
<tr>
<td>40-49</td>
<td>40 (19.0%)</td>
<td>5 (14.7%)</td>
<td>25 (29.1%)</td>
<td>2 (2.2%)</td>
</tr>
<tr>
<td>50-64</td>
<td>33 (15.6%)</td>
<td>7 (20.6%)</td>
<td>17 (19.8%)</td>
<td>10 (11.0%)</td>
</tr>
<tr>
<td>65+</td>
<td>2 (0.9%)</td>
<td>1 (2.9%)</td>
<td>1 (1.2%)</td>
<td>9 (9.9%)</td>
</tr>
<tr>
<td>Missing</td>
<td>11 (5.2%)</td>
<td>3 (8.8%)</td>
<td>5 (5.8%)</td>
<td>3 (3.3%)</td>
</tr>
</tbody>
</table>

Table 2 summarizes the age ranges of participants. Age ranges of the participants varied substantially. The percentage, 18% (n=38) of participants were in the age range of 18-19, while the majority 19% (n=40) of the participants were between the ages of 40-49, and the number of the participants, 15.6% (n=33) were between the ages of 50-64. In addition, 10.9% (n=23) of the participants were between the ages of 30-34, while 10.4% (n=22) of the participants were between the ages of 20-21.

The age ranges of participants from each college varied substantially. From College A, most of the participants (20.6%, n=7) were between the ages of 50-64, while fewer (14.7%, n=5) of the participants were between the ages of 40-49, and 11.8% (n=4)
of the participants were between the ages of 25-29, and 11.8% (n=4) 18-19 years old.

From College B, most of the participants (29.1%, n=25) were between the ages of 40-49, and a fifth of the participants (19.8%, n=17) were between the ages of 50-64. From College C, most of the participants (31.9 %, n=29) were between the ages of 18-19, and about half that number (15.4%, n=14) were between the ages of 20-21.

Table 3

<table>
<thead>
<tr>
<th>Frequency (%) of Participants’ Student Enrollment Status</th>
<th>Entire Sample (n = 211)</th>
<th>College A (n = 34)</th>
<th>College B (n = 86)</th>
<th>College C (n = 91)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>135 (64.0)</td>
<td>21 (61.8)</td>
<td>51 (59.3)</td>
<td>63 (69.2)</td>
</tr>
<tr>
<td>No</td>
<td>65 (30.8)</td>
<td>10 (29.4)</td>
<td>31 (36.0)</td>
<td>24 (26.4)</td>
</tr>
<tr>
<td>Missing</td>
<td>11 (5.2)</td>
<td>3 (8.8)</td>
<td>4 (4.7)</td>
<td>4 (4.4)</td>
</tr>
</tbody>
</table>

Table 3 summarizes participants’ enrollment status at each community college. In terms of student enrollment status, 64% (n=135) of the participants were full-time students, while 30.8% (n=65) were not full-time students. In College A, 61.8% (n=21) of the participants were full-time students, and 29.4% (n=10) were not full-time students. In College B, 59.3% (n=51) of the participants were full-time students, and 36% (n=31) were not full-time students. In College C, 69.2% (n=63) of the participants were full-time students, and 26.4% (n=24) were not full-time students. The pattern is that most of the participants in this study are enrolled as full-time students.
Table 4

<table>
<thead>
<tr>
<th>Frequency (%) of Participants’ Online Course Enrollment</th>
<th>Entire Sample</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 211)</td>
<td>(n = 34)</td>
<td>(n = 86)</td>
<td>(n = 91)</td>
</tr>
<tr>
<td>Taking Online Courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>57 (27.0%)</td>
<td>11 (32.4%)</td>
<td>31 (36.0%)</td>
<td>15 (16.5%)</td>
</tr>
<tr>
<td>No</td>
<td>140 (66.4%)</td>
<td>19 (55.9%)</td>
<td>50 (58.1%)</td>
<td>71 (78.0%)</td>
</tr>
<tr>
<td>Missing</td>
<td>14 (6.6%)</td>
<td>4 (11.8%)</td>
<td>5 (5.8%)</td>
<td>5 (5.5%)</td>
</tr>
</tbody>
</table>

Table 4 summarizes participants’ online course enrollment. Of the total sample, 66.4% (n=140) of the participants were not enrolled in online courses, while 27% were enrolled in online courses. In College A, 32.4% (n=11) of the participants were enrolled in online courses, while 55.9% (n=19) were not enrolled in online courses. In College B, 36% (n=31) of the participants were enrolled in online courses, while 58.1% (n=50) were not enrolled in online courses. In College C, 16.5% (n=15) of the participants were enrolled in online courses, while 78% of the participants were not enrolled in online courses. Overall, the student participants in this study are not enrolled in online courses.

Table 5

<table>
<thead>
<tr>
<th>Frequency (%) of Participants’ Past-Term GPA</th>
<th>Entire Sample</th>
<th>College A</th>
<th>College B</th>
<th>College C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 211)</td>
<td>(n = 34)</td>
<td>(n = 86)</td>
<td>(n = 91)</td>
</tr>
<tr>
<td>GPA Last Term</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.50-4.00</td>
<td>45 (21.3%)</td>
<td>7 (20.6%)</td>
<td>23 (26.7%)</td>
<td>15 (16.5%)</td>
</tr>
</tbody>
</table>
Table 5 summarizes participants’ past-term GPA. Within the entire sample, in terms of academic achievement, (24.2%) of participants reported a GPA of 2.50-2.99 for the past term, while 23.7% of the participants reported a GPA of 3.00-3.49 for the past term, and 21.3% of the participants reported a GPA of 3.50-4.00 for the past term. In College A, 29.4% of the participants reported a GPA of 3.00-3.49 for the past term, 20.6% of the participants reported a GPA of 3.50-4.00 for the past term, 14.7% of the participants reported a GPA of 2.00-2.49 for the past term, and 11.8% of the participants reported a GPA of 2.50-2.99 for the past term. In College B, 27.9% of the participants reported a GPA of 2.50-2.99 for the past term, while 26.7% of the participants reported GPAs of 3.00-3.49 and 3.50-4.00 for the past term. In College C, 25.3 % of the participants reported a GPA of 2.50-2.99 for the past term, 18.7% of the participants reported a GPA of 3.00-3.40 for the past term, and 16.5% of the participants reported a GPA of 3.50-4.00 for the past term. The overall past-term pattern for the participants in this study was from 2.50-2.00 through 3.50-4.00.
Table 6

*Frequency (%) of Participants’ Expected GPA This Term*

<table>
<thead>
<tr>
<th>Expected GPA This Term</th>
<th>Entire Sample (n = 211)</th>
<th>College A (n = 34)</th>
<th>College B (n = 86)</th>
<th>College C (n = 91)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50-4.00</td>
<td>65 (30.8%)</td>
<td>9 (26.5%)</td>
<td>29 (33.7%)</td>
<td>27 (29.7%)</td>
</tr>
<tr>
<td>3.00-3.49</td>
<td>76 (36.0%)</td>
<td>10 (29.4%)</td>
<td>32 (37.2%)</td>
<td>34 (37.4%)</td>
</tr>
<tr>
<td>2.50-2.99</td>
<td>43 (20.4%)</td>
<td>7 (20.6%)</td>
<td>14 (16.3%)</td>
<td>22 (24.2%)</td>
</tr>
<tr>
<td>2.00-2.49</td>
<td>13 (6.2%)</td>
<td>4 (11.8%)</td>
<td>3 (3.5%)</td>
<td>6 (6.6%)</td>
</tr>
<tr>
<td>1.50-1.99</td>
<td>6 (2.8%)</td>
<td>1 (2.9%)</td>
<td>4 (4.7%)</td>
<td>1 (1.1%)</td>
</tr>
<tr>
<td>0.00-1.49</td>
<td>2 (0.9%)</td>
<td>1 (2.9%)</td>
<td>1 (1.2%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Missing</td>
<td>6 (2.8%)</td>
<td>2 (5.9%)</td>
<td>3 (3.5%)</td>
<td>1 (1.1%)</td>
</tr>
</tbody>
</table>

Table 6 describes participants’ expected GPA for the current term. Within the entire sample, 36% of the participants reported that their expected GPA for the current term would be 3.00-3.49, while 30.8% of the participants reported that their expected GPA for the current term would be 3.50-4.00, and 20.4% of the participants reported that their expected GPA for the current term would be 2.50-2.99. In College A, 29.4% of the participants reported that their expected GPA for the current term would be 3.00-3.49, 26.5% of the participants reported that their expected GPA for the current term would be 3.50-4.00, and 20.6% of the participants reported that their expected GPA for the current term would be 2.50-2.99. In College B, 37.2% of the participants reported that their expected GPA for the current term would be 3.00-3.49, 33.7% of the participants reported that their expected GPA for the current term would be 3.50-4.00, and 16.3% of the participants reported that their expected GPA for the current term would be 2.50-2.99.
In College C, 37.4% of the participants reported that their expected GPA for the current term would be 3.00-3.49, 29.7% of the participants reported that their expected GPA for the current term would be 3.50-4.00, and 24.2% of the participants reported that their expected GPA for the current term would be 2.50-2.99 for the current term. From the data listed above, most of the students who participated in this study expected to receive a GPA of 2.50-2.99 through 3.50-4.00.

**Responses to Research Questions**

**RQ 1: What is the level of college self-efficacy among African American males in two-year community colleges?**

The analysis of the level of college self-efficacy among African American males in two-year community colleges revealed that African American males have a relatively high level of college self-efficacy. In this study, college self-efficacy was measured by combining scores of two scales/components: course efficacy and social efficacy. A third component, roommate efficacy, was part of the original instrument measuring college self-efficacy, but it did not apply to the population of interest in this study and, as a result, was omitted from the instrument. Table 7 summarizes participants’ levels of college self-efficacy. It provides the median, mean, and standard deviations for the key variables. Mean scores across the scale items were calculated rather than total scores to adjust for missing items. Thus, scores of respondents who mistakenly skipped a single survey item were still included in the analysis.

To gain further insight into the nuisances of African American males in two year community colleges, the researcher also provides the range of scores for the two subcomponents of college self-efficacy, namely course self-efficacy and social self-
efficacy. Neither of these components is a self-standing variable, but analyzing them separately can provide us with an additional understanding of college self-efficacy.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Median</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Self-Efficacy</td>
<td>1-9</td>
<td>7.22</td>
<td>7.05</td>
<td>1.27</td>
</tr>
<tr>
<td>Course Self-Efficacy</td>
<td>1-9</td>
<td>7.45</td>
<td>7.24</td>
<td>1.29</td>
</tr>
<tr>
<td>Social Self-Efficacy</td>
<td>1-9</td>
<td>7.00</td>
<td>6.76</td>
<td>1.47</td>
</tr>
</tbody>
</table>

Possible scores for college self-efficacy, course self-efficacy, and social self-efficacy ranged from 1-9 (9 indicating the highest degree of self-efficacy). The participants reported a mean self-efficacy score on all three scales of approximately 7, indicating a relatively high level of perceived college self-efficacy, course self-efficacy, and social self-efficacy.

Figure 2 shows the mean ratings of college self-efficacy of each community college. There were differences in self-efficacy among the three colleges, but these differences did not meet the threshold of statistical significance ($\alpha = .05$) (see Table 8).

Table 8

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Self-Efficacy</td>
<td>3.937</td>
<td>.009</td>
</tr>
<tr>
<td>Course Self-Efficacy</td>
<td>.463</td>
<td>.630</td>
</tr>
</tbody>
</table>
To gain further insight into the differences amongst colleges, the researcher also compared the colleges with respect to course self-efficacy and social self-efficacy, the two sub-components of college self-efficacy. Course self-efficacy was slightly higher than college self-efficacy at all community colleges, and social self-efficacy was slightly lower than college self-efficacy at all community colleges. However, differences amongst the colleges were not statistically significant (see Table 8).

![Figure 2](image.png)

*Figure 2.* Mean ratings of college self-efficacy, course self-efficacy, and social self-efficacy, by college.

Figure 3 shows the mean ratings of college self-efficacy, course self-efficacy, and social self-efficacy by age. There were differences in self-efficacy among the various age groups at these colleges, but these differences did not meet the threshold of statistical significance (*alpha* = .05).
Figure 3. Mean rating of college self-efficacy, course self-efficacy, and social self-efficacy, by age.

RQ 2: How do African American males in two-year community colleges perceive their campus climate/environment?

The analysis of the perception of campus climate/environment of African American males in two-year community colleges revealed that African American males are generally positive about their campus environment. Table 9 provides frequency statistics that describe participants’ level of satisfaction with their college environment across the entire sample. Table 9 also provides the range, median, mean, and standard deviations of each of the key variables. Mean scores across the scale items were calculated rather than total scores to compensate for missing items. Thus, scores of respondents who mistakenly skipped a single survey item were still included in the analysis.

Table 9

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Median</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Environment</td>
<td>1-5</td>
<td>4.07</td>
<td>3.97</td>
<td>0.61</td>
</tr>
</tbody>
</table>
To record the perceptions of campus environment, each item was rated on a 1-5 scale (5 indicating the most positive perceptions), and the mean average across all items was just under 4, indicating that African American males reported relatively positive perceptions of their college environments at each community college.

Figure 4 illustrates the distribution of college environment ratings across the entire sample. When responses from participant’s at all three colleges were combined, the distribution was normal.

![Figure 4. Distribution of campus environment ratings across the entire sample.](image)

Figure 5 illustrates the mean ratings of campus environment, by college.

![Figure 5. Mean ratings of campus environment, by college.](image)
The responses in Figure 5 reflect very close mean scores around 3.9. The ANOVA analysis comparing the campus environment perceptions between the three colleges revealed no statistically significant differences in the ratings (see Table 10).

Table 10

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Environment</td>
<td>.024</td>
<td>.977</td>
</tr>
</tbody>
</table>

**RQ 3: Among African American males in two-year community colleges, is there a significant relationship among college self-efficacy and campus environmental factors?**

The researcher conducted correlation analyses to identify whether a statistically significant relationship existed between levels of college self-efficacy and perceptions of campus environment by African American males at two-year community colleges. The Pearson product-moment correlation coefficient was used to examine the relationships among college self-efficacy, campus environment, and academic achievement among African American males. Table 11 provides the bivariate correlation coefficients for key study variables in the entire sample.

Table 11

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 College Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Campus Environment</td>
<td></td>
<td>.47*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Past Term GPA</td>
<td></td>
<td></td>
<td>.25*</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bivariate Correlations among Key Study Variables for All Colleges**
The results indicated that there is a significant positive correlation between college self-efficacy and perceived campus environment ($r = .47, p < .01$). This suggests that students who perceive a more positive environment tend to have higher college self-efficacy.

To gain further insights into the data, the researcher also correlated the two sub-components of college self-efficacy with each other, as well as with campus environment and with GPA (see Table 11). Although the two sub components do not stand alone on their own, the correlations helped reveal important information. Course self-efficacy and social self-efficacy were extremely highly correlated ($r = .75, p < .01$). This high correlation might indicate multicollinearity between the components of the main variable. Correlating each of the components with campus environment and GPA could be a way to avoid issues with multicollinearity. A statistically significant positive correlation was found (a) between perceptions of college environment and course self-efficacy ($r = .42, p < .01$) and (b) between perceptions of college environment and social self-efficacy ($r = .47, p < .01$).

Table 12, Table 13, and Table 14 present the results of the correlational analyses separately for each community college. The pattern of correlations among variables for
all colleges combined was consistent with the pattern of correlations among variables for each college individually, although there were a few minor differences.

Table 12 presents the bivariate correlations among key study variables at College A.

Table 12

*Bivariate Correlations among Key Study Variables at College A*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 College Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Campus Environment</td>
<td>.46*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Past Term GPA</td>
<td>.39*</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Expected GPA</td>
<td>.51*</td>
<td>.16</td>
<td>.48**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Course Self-Efficacy</td>
<td>.39*</td>
<td>.44**</td>
<td>.52**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Social Self-Efficacy</td>
<td>.48**</td>
<td>.28</td>
<td>.40*</td>
<td>.69**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **p < .01
*p < .05

Table 13 presents the bivariate correlations among key study variables at College B.

Table 13

*Bivariate Correlations among Key Study Variables at College B*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>- College Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Campus Environment</td>
<td>.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 14 presents the bivariate correlations among key study variables at College C.

### Bivariate Correlations among Key Study Variables at College C

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 College Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Campus Environment</td>
<td>.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Past Term GPA</td>
<td>.18</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Expected GPA</td>
<td>.32**</td>
<td>.22*</td>
<td>.51**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Course Self-Efficacy</td>
<td>.41**</td>
<td>.21</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social Self-Efficacy</td>
<td>.50**</td>
<td>.11</td>
<td>.21*</td>
<td>.79**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** **p < .01  
* p < .05
The correlation analyses that were conducted to answer Research Question 3 revealed that there were strong correlations between college self-efficacy and campus environment perceptions of African American males on community college campuses.

**RQ 4**: Can academic achievement of African American males in two-year community colleges be predicted by college self-efficacy and/or campus environmental factors?

To determine whether the academic achievement of African American males in two-year community colleges can be predicted by college self-efficacy and/or campus environmental factors, a series of multiple regression analyses was conducted. The primary multiple regression analysis included two independent variables: college self-efficacy and campus environment. Academic achievement of African American males was measured separately by two different variables; expected GPA and past-term GPA were taken separately as proxies for expected academic achievement and past-term academic achievement. Thus, expected GPA was the dependent variable in the first set of analyses, and past-term GPA was the dependent variable in the second set of analyses. However, because the two components of college self-efficacy (course self-efficacy and social self-efficacy) were extremely highly correlated ($r=.75$), to avoid multicollinearity effects, the researcher conducted two multiple regression analyses with each of the components separately. The information gained from these two analyses helped further understand the predictive power of self-efficacy.

As prior research guides us, the problem of multicollinearity can be resolved by testing the two efficacy subscales as separate predictors. Their high interrelatedness (as evidenced by their correlation coefficient, $r = .75$) suggests that the predictor variables
that were used in this study may not have been the best self-efficacy predictors to identify indicators that lead to positive academic outcomes among African American males at two-year colleges. In order to moderate influence of collinearity, two separate regression analyses were conducted that featured course efficacy and campus environment as independent variables and expected GPA and past-term GPA as the dependent variables, and two additional regression analyses were conducted that featured social efficacy and campus environment as the independent variables, and each of expected and past-term GPA as the dependent variables. The following paragraphs report on the multiple regression analyses conducted by the researcher. In the first analysis, expected GPA was the dependent variable, and college self-efficacy and college environment were entered as predictors. The analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 15. Results of the multiple regression analysis showed that college self-efficacy is a significant predictor of expected GPA among African American males in two-year community colleges (β = .35), but perceptions of college environment are not. Overall, the model was statistically significant, $F(2, 202)=13.101, p<.001$. The adjusted $R^2$ of .11 indicates that about 11% of variance in expected GPA can be explained by college self-efficacy and perceptions of college environment. College self-efficacy appeared to be a relatively accurate predictor of GPA; however, only 11% of the variance was accounted for, leaving 89% of the variance to be accounted for by unknown factors (i.e., error, other variables unaccounted for).

Table 15

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>p-value</th>
<th>Std.</th>
</tr>
</thead>
</table>

Regression Model on College Self-Efficacy and College Environment of Expected GPA
In the second multiple regression analysis, expected GPA was again the dependent variable. Course self-efficacy and college environment were entered as predictor variables. The analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 16. One of the component parts of college self-efficacy (course self-efficacy) was a significant predictor of expected GPA among African American males in two-year community colleges ($\beta = -.30$, $p < .000$), while college environment was not; interestingly, the partial correlation sign was negative in this model. The negative partial correlation of course self-efficacy is surprising. It signals the lower the course self-efficacy is for African American males, the higher they expect to achieve academically in the future. An explanation for this negative partial correlation might be because course self-efficacy was separated in this analysis from social self-efficacy in the instrument. The separation might have affected the correlation. Overall, results of the regression analysis showed that the model was statistically significant, $F (2,188) = 14.130$, $p < .000$. The adjusted $R^2$ of .121 indicates that about 12% of the variance in expected GPA can be explained by course self-efficacy and college environment.

Table 16

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>$p$-value</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Self-Efficacy</td>
<td>-.306</td>
<td>.000</td>
<td>.058</td>
</tr>
<tr>
<td>College Environment</td>
<td>-.101</td>
<td>.179</td>
<td>.124</td>
</tr>
</tbody>
</table>
In the third multiple regression analysis, expected GPA was again the dependent variable. Social self-efficacy and college environment were entered as predictors. The analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 17. One of the component parts of college self-efficacy (social self-efficacy) was a significant negative predictor of expected GPA among African American males in two-year community college (β = -.20), while college environment was not significantly predictive of their expected GPA. Similarly to the results in Table 16, the negative partial correlation of social self-efficacy is surprising and it signals that the lower the social self-efficacy of the student is, the higher they expect to achieve academically in the future. One explanation for this negative partial correlation might be because social self-efficacy was separated in this analysis from course efficacy in the instrument. The separation might have affected the correlation. Similar to the model including course self-efficacy, the partial correlation here was also negative. Overall, the results of the regression analysis showed that the model was statistically significant $F(2,188) = 9.064, p<.000$. The adjusted $R^2$ of .078 indicates that about 8% of the variance in expected GPA can be explained by social self-efficacy and college environment.

Table 17

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>p-value</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Self-Efficacy</td>
<td>-.209</td>
<td>.009</td>
<td>.055</td>
</tr>
<tr>
<td>College Environment</td>
<td>-.134</td>
<td>.093</td>
<td>.132</td>
</tr>
</tbody>
</table>

In the fourth multiple regression analysis, past-term GPA was the dependent variable. College self-efficacy and college environment were entered as predictors. The
analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 18. Results of the regression analysis showed that college self-efficacy is a significant predictor of past-term GPA among African American males in two-year community colleges (β = .25), but college environment is not. Overall, the model was statistically significant, $F(2,166)=5.449, p<.001$. The adjusted $R^2$ of .051 indicates that about 5% of the variance in past-term GPA can be explained by college self-efficacy and college environment.

Table 18

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>$p$-value</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Self-Efficacy</td>
<td>.25</td>
<td>.00</td>
<td>.076</td>
</tr>
<tr>
<td>College Environment</td>
<td>-.01</td>
<td>.94</td>
<td>.156</td>
</tr>
</tbody>
</table>

In the fifth multiple regression analysis, past-term GPA was again the dependent variable. Course self-efficacy and perceptions of college environment were entered as predictors. The analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 19. Results of the regression analysis showed that neither independent variable was a significant predictor of past-term GPA among African American males at two-year community colleges (β = -.23 and β = -.03, respectively). Similar to the model including college self-efficacy and college environment, the partial sign was also negative in this model as well. College environment was not a good predictor for past-term GPA. Overall, the regression model was significant, $F(2,157) = 5.140, p<.007$. The adjusted $R^2$ of .049 indicates that about
5% of the variance in past-term GPA can be explained by course self-efficacy and college environment.

Similarly to the results in Tables 16 and 17, the one interesting occurrence in Tables 19 and 20 are the significant negative partial correlations on course efficacy and social efficacy in the model. The negative partial correlations are in contrast to the positive partial correlations of college self-efficacy in Table 18. These differences might be explained with the high interrelatedness between the subcomponents of college self-efficacy.

Table 19

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>p-value</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Self-Efficacy</td>
<td>-.230</td>
<td>.007</td>
<td>.072</td>
</tr>
<tr>
<td>College Environment</td>
<td>-.037</td>
<td>.658</td>
<td>.151</td>
</tr>
</tbody>
</table>

In the sixth multiple regression analysis, past-term GPA was again the dependent variable. Social self-efficacy and perceptions of college environment were entered as predictors. The analysis controlled for the three colleges as well. Standardized coefficients of the model are presented in Table 20. Results of the regression analysis indicated that social self-efficacy and perceptions of college environment were not statistically significant predictors of past-term GPA among African American males at two-year community colleges (β= -.16 and β= -.05). The overall model did not successfully predict past-term GPA based on either social self-efficacy or college environment. The regression model was not statistically significant F (2,157)= 3.209, p<.058. The adjusted R² of .027 indicates that about 2% of the variance in past-term GPA
can be explained by social self-efficacy and college environment. Social self-efficacy did account for some variance, but college environment did not.

Table 20

| Regression Model on Social Self-Efficacy and College Environment of Past-Term GPA |
|---------------------------------|--------|--------|
| Predictor                        | β      | p-value | Std. Error |
| Social Self-Efficacy             | -.169  | .058   | .067       |
| College Environment              | -.052  | .558   | .159       |

RQ 5: What is the effect of college self-efficacy on the relationship between campus climate and academic achievement?

To test whether college self-efficacy moderates the relationship between perceptions of campus environment and the academic achievement of African American males in two-year community colleges, a series of four stepwise regression analyses were conducted. The interaction variables have to be centered or “mean-centered” before creating the interaction term. For example, Rokkan, Heide, and Wathne (2003) stated, “To mitigate the potential threat of multicollinearity, we mean-centered all independent variables that constituted an interaction term” (p. 219). However, some scholars have argued that mean-centering in moderated regression analysis does not help. Aiken and West (1991) have argued that mean-centering does not improve the accuracy of numerical computation of statistical parameters; that it does not change the sampling accuracy of main effects, simple effects, and/or interaction effects; and that it does not change overall measures of fit, such as $R^2$ and adjusted-$R^2$ (Aiken & West, 1991).

Centering can reduce correlation between the interaction term and constituent main effect variables. Centering has a very important effect on the coefficients. It can
make interpretation of regression coefficients more intuitive in some contexts. If coefficients are not centered they will be affected by the values of the two interacting variables, which is why the researcher centered the terms for this research study.

The terms were centered in this research study. In each of the following analyses, Step 1 was identical to the analyses reported above under Research Question 4. Only the values for the independent variables—i.e., college self-efficacy (course self-efficacy or social self-efficacy) and college environment—were entered as predictors of expected GPA or past-term GPA. In Step 2, the interactions among college self-efficacy and college environment were entered as predictors of academic achievement. Thus, the analysis related to Research Question 5 tested whether the interaction term was statistically significant (including the interaction terms) and whether it provided a superior fit to the data (without the interaction terms). In the stepwise regression, the researcher inserted the main effects in the first block of the regression and then the interaction in the second block of the regression.

In the first stepwise regression analysis, expected GPA was the dependent variable. College self-efficacy and college environment were entered as predictors in Step 1, and the interaction of college self-efficacy and college environment was entered as a predictor in Step 2. Results showed that the interaction was not statistically significant ($p = .28$). As shown in Table 21, the interaction also did not improve goodness of fit or the proportion of variance that academic achievement accounted for. These results indicate that the effect of campus climate on academic achievement did not vary based on the level of college self-efficacy.
In the second stepwise regression analysis, expected GPA was again the dependent variable. However, this time, the two components of college self-efficacy (i.e., course self-efficacy and social self-efficacy), along with perceptions of college environment, were entered as separate predictors in Step 1. The interactions of course self-efficacy, social self-efficacy, and college environment were entered as predictors in Step 2. Results showed that the interactions were not statistically significant. As shown in Table 22, including the interactions in the regression analysis also did not improve goodness of fit or the proportion of variance accounted for by academic achievement. These results all indicate that the effect of campus climate on academic achievement did not vary based on the level of course self-efficacy or social self-efficacy.

Table 21

<table>
<thead>
<tr>
<th></th>
<th>Step 1 (without interaction)</th>
<th>Step 2 (with interaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R²</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>R² Change</td>
<td></td>
<td>.01</td>
</tr>
<tr>
<td>F-Change</td>
<td>F(1,201) = 1.16, p = .28</td>
<td></td>
</tr>
</tbody>
</table>

Statistics for Stepwise Regression on College Self-Efficacy and College Environment of Expected GPA

In the second stepwise regression analysis, expected GPA was again the dependent variable. However, this time, the two components of college self-efficacy (i.e., course self-efficacy and social self-efficacy), along with perceptions of college environment, were entered as separate predictors in Step 1. The interactions of course self-efficacy, social self-efficacy, and college environment were entered as predictors in Step 2. Results showed that the interactions were not statistically significant. As shown in Table 22, including the interactions in the regression analysis also did not improve goodness of fit or the proportion of variance accounted for by academic achievement. These results all indicate that the effect of campus climate on academic achievement did not vary based on the level of course self-efficacy or social self-efficacy.

Table 22

<table>
<thead>
<tr>
<th></th>
<th>Step 1 (without interactions)</th>
<th>Step 2 (with interactions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R²</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>R² Change</td>
<td></td>
<td>.01</td>
</tr>
<tr>
<td>F-Change</td>
<td>F(2,199) = 0.74, p = .48</td>
<td></td>
</tr>
</tbody>
</table>
In the third stepwise regression analysis, past-term GPA was the dependent variable. College self-efficacy and college environment were entered as predictors in Step 1, and the interaction of college self-efficacy and college environment was entered as a predictor in Step 2. Results showed that the interaction was not statistically significant ($p = .10$). As shown in Table 23, including the interaction did not improve goodness of fit or the proportion of variance accounted for by academic achievement. These results all indicate that the effect of campus climate on academic achievement did not vary based on the level of college self-efficacy.

Table 23

<table>
<thead>
<tr>
<th>Statistics for Stepwise Regression on College Self-Efficacy and College Environment of Past-Term GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 (without interactions)</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
</tr>
<tr>
<td>$R^2$ Change</td>
</tr>
<tr>
<td>F-Change</td>
</tr>
</tbody>
</table>

In the fourth stepwise regression analysis, past-term GPA was again the dependent variable. However, this time the two components of college self-efficacy (i.e., course self-efficacy and social self-efficacy) were entered as separate predictors in Step 1, along with college environment. The interactions of course self-efficacy, social self-efficacy, and college environment were entered as predictors in Step 2. Results showed that the interactions were not statistically significant. As shown in Table 24, including the interactions in the regression analysis also did not improve goodness of fit or the proportion of variance accounted for by academic achievement. These results all indicate
that the effect of campus climate on academic achievement did not vary based on the
level of course self-efficacy or social self-efficacy.

Table 24

<table>
<thead>
<tr>
<th></th>
<th>Step 1 (without interactions)</th>
<th>Step 2 (with interactions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R²</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>R² Change</td>
<td></td>
<td>.02</td>
</tr>
<tr>
<td>F-Change</td>
<td></td>
<td>F(2,163) = 1.30, ( p = .28 )</td>
</tr>
</tbody>
</table>

**Summary of Findings**

In summary, the findings in this study reveal high levels of college self-efficacy, high levels of course self-efficacy, and positive perceptions of campus environment among African American males at two-year colleges. In addition, when African American males feel positive about their environment, their college self-efficacy is higher. College self-efficacy emerged as a significant predictor of both expected GPA and past-term GPA and accounted for 11% of the variance, but college environment did not. In addition, when analyzed separately for additional information, neither course self-efficacy nor social self-efficacy were accurate predictors of past-term GPA; however, social self-efficacy and college environment were accurate predictors of past term GPA. In addition, when campus climate was regressed on academic achievement, it did not vary based on the level of college self-efficacy, level of course self-efficacy, or level of social self-efficacy.

There was no interaction term for the interaction effect or the moderator effect, so the combination of both predictors did not account for additional variance in the results.
Results showed that the interaction between the variables was not statistically significant. Finally, multicollinearity was discovered between the two components of the independent variable college self-efficacy: course self-efficacy and social self-efficacy.

ANOVA were conducted to explore whether statistically significant differences existed among perceptions of college environment, course efficacy, and social efficacy among College A, College B, and College C. Each analysis controlled for the three colleges as well. The results indicated that there were no statistically significant differences among the colleges for any of these three variables. ANOVA were conducted to explore whether statistically significant differences existed among past GPA and predicted GPA among College A, College B, and College C. The results indicated that there were no statistically significant differences among the colleges in either past term GPA or predicted GPA.

Because the researcher was interested in exploring possible relationships among the independent variables, and because college groups were not accounted for as an independent variable in the initial analysis, additional multiple regression analyses were conducted. Specifically, multiple regression analyses were conducted including college groups as an independent variable and also controlling for college group. After controlling for college group, the overall model was significant ($p<.01$) in predicting both past term GPA and expected GPA. College efficacy accounted for most (.112) of the variance and was a better predictor of past term GPA and expected GPA than college environment. In other words, controlling for college groups did not alter the statistically significant contribution of college efficacy and college environment as predictors of past term GPA and expected GPA. Controlling for college group did, however, create a
marginal increase in the ability of social self-efficacy to predict past-term GPA ($p=.058$ to $p=.020$).

In order to address the effects of multicollinearity, multiple regression analyses were conducted after centering the independent variables. Analyses were conducted centering the following independent variables: college environment, course self-efficacy, and social self-efficacy. Just as in the original analyses, the results after centering the variables indicated that the majority of the variance was still accounted for by course efficacy (.132) and college efficacy (.112) in predicting expected GPA. Also, just as in the original analyses, the results after centering the variables indicated that the majority of the variance was still accounted for by course efficacy (.065), college efficacy (.047), and social self-efficacy (.026) in predicting past-term GPA. In other words, controlling for college groups and centering terms did not alter the statistically significant contribution of college efficacy, course efficacy, and social self-efficacy as predictors of past term GPA and expected GPA.
Chapter Five

Discussion

Summary, Conclusions, and Recommendations

The purpose of this study was (a) to provide an analysis of the levels of college self-efficacy and of the perceptions of campus environmental factors by African American males at rural, urban, and suburban two-year community colleges in the state of Ohio and (b) to determine whether there was a statistically significant relationship between college self-efficacy, campus environmental perceptions, and academic achievement at these types of community colleges (i.e., rural, urban, and suburban) in Ohio. An additional purpose of this study was to determine whether academic achievement could be predicted from college self-efficacy and perceptions of campus environmental factors at community colleges in the state of Ohio. Survey research methodology guided this examination of college self-efficacy of African American male community college students. This chapter discusses the findings of the study and its contribution to the research literature and outlines its relevance for practitioners, including student services personnel, staff members, administrators, and policymakers. In addition, this chapter provides recommendations for future research and a summary of the overall context of the study.

Summary of the Findings

Results for Research Question One indicated that African American males have relatively high levels of college self-efficacy. For the purposes of this study, college self-efficacy was comprised of two components: course self-efficacy and social self-efficacy. Neither of these components is a self-standing variable, but additional understanding of
college self-efficacy was achieved by analyzing them separately. Levels of course self-efficacy were slightly higher among African American males’ at all three community colleges, and social self-efficacy was slightly lower. Results for Research Question Two indicated that African American males reported positive perceptions of their college environment at each community college. Prior research has indicated that college environment has not been seen as positive among African American males; however, this study found that the environment was seen as positive for this population of students. Results for Research Question Three indicated that students who perceive a more positive campus environment tend to experience higher levels of college self-efficacy. The aspects of the college environment that were associated included college self-efficacy and course self-efficacy. Results for Research Question Four indicated that college self-efficacy was a statistically significant predictor of expected GPA among African American males in two-year community colleges. Results for this research question also indicated that both of the components of college self-efficacy (i.e., course self-efficacy and social self-efficacy) were statistically significant predictors of expected GPA among African American males, while college environment was not. Analysis of the data also indicated two additional findings: (a) college self-efficacy was a significant predictor of past-term GPA among African American males, but college environment was not, and (b) course self-efficacy, social self-efficacy and college environment were not statistically significant predictors of past-term GPA. Results for Research Question Five indicated that the effect of campus climate on academic achievement did not vary based on the level of college self-efficacy and that the effect of campus climate on academic achievement did not vary based on course self-efficacy or social self-efficacy.
Discussion of Findings

The results of this research contribute to our understanding of the African American male community on two-year campuses in five important ways.

**Contribution One: Rising College Self-Efficacy**

African American males increasingly have become more confident in their academic abilities. For example, approximately 25 years ago, Hare (1987) reported that when dealing with issues of self-efficacy, African American students rated themselves lower than their White counterparts. However, in the early 1990s, just five years later, Schunk (1991) indicated that this trend had begun to reverse. Schunk indicated that when it comes to academic self-efficacy, African American students consistently have scored higher than their White peers. Clearly, there has been a growing historical trend in higher education suggesting that African American males have rated themselves higher in terms of their academic and social self-efficacy. The results of the present research further support this trend. Such rising trends can be attributed to a variety of socio-economic, educational, and political factors that have pushed the academic community to attempt to address the needs of this population. Various academic support systems that previously were not in existence, including tutoring services, learning communities, and cohort systems that feature block scheduling for courses—all of which have provided extra support and likely have contributed to increased self-efficacy among African American males at two-year colleges, have been put in place in the last two decades. Their impact on the college self-efficacy of African American males could be significant.
Contribution Two: Increasing Trends of Support in the Campus Environment

As efforts have increased to improve the experience and increase the success of college students in general, the engagement of African American males in the campus social and academic environment has emerged as a critical area of investigation (Flowers, 2003). For example, Hawkins (1999) and Flowers and Pascarella (2003) reported that in an attempt to adjust to new academic environments and contexts (e.g., entering college after graduating high school or entering college after a lengthy absence), many African American males may feel isolated from their counterparts. African American males in this study reported they do not feel like class sizes are too large, and that college staff has been warm and friendly to them. In addition, African American males reported that they feel valued on campus. Furthermore, students reported that faculty are always available to discuss their academic concerns with them. The students in this study also indicated that the college environment is not a cold, uncaring place and they feel very comfortable in their community college environment.

This increased feeling of belonging to the campus environment is likely the result of a trend toward concerted institutional efforts (a) to remove institutional barriers and challenges that impede African American males, (b) to create supportive campus climates (Nettles, 1988; Townsend, 1994), and (c) to create positive social environments (Pascarella & Terenzini, 1991). In short, even though campus climate and institutional environment often have been referred to as significant contributors to the challenges that students of color experience in higher education settings (Greene, 2005), the results of this study attest to positive perceptions of campus environments indirectly pointing to
strong institutional efforts to create academic environments in which African American males in two-year colleges feel socially connected and academically supported.

The notion that African American males may increasingly perceive education not only as a viable option for them but also an opportunity suggests a change in the way that some African American communities have (de)valued the role of education. As Harper suggested in his 2012 study, that African American males are at extreme risk of underachieving or disengaging from schools for a variety of reasons. However, he further points out that it is essential to shed more light on the school environment with heavy attention to the environment playing an important role in the pursuit of their success (Harper, 2012). This study can attest to the positive feelings that African American males are experiencing on community college campuses. This new perception and valuing of education has the potential to break generational patterns that have led to absentee fathers, and it may allow for African American males to assume a new role in African American families as providers, leaders, and husbands in their community.

In recent decades, many African American males did not believe they had a chance to pursue higher education, nor did they perceive higher education as a worthy and valuable goal. More recently, African American males have begun to alter their perceptions about the value and role of education. They strongly desire opportunities to be successful and have begun to pursue education at the community college level as their first attempt to become successful. The realization that education has become increasingly attainable for them offers them an opportunity to prove to their communities that they can obtain an education and resist the perspective perpetuated by a subculture that traditionally has devalued education.
Contribution Three: Higher Confidence to Perform in Class Compared to Confidence to Navigate the Social Environment

The results of this study indicated that African American males at two-year colleges feel more confident in their ability to perform in class, which aligns with the work of Schunk (1995). Schunk observed that campus conditions have been shown to influence self-efficacy. For example, one way that self-efficacy can be influenced is through the common mechanisms of informing students about their progress (Schunk, 1995). However, even though the finding of this study align with Schunk’s perspective, they also contradict results from Solberg et al.’s (1993) study. Solberg et al. found that self-efficacy is related to social integration and is also an important determinant of educational outcomes. However, in this study, African American males scored slightly lower on measures of social self-efficacy than they did on measures of course self-efficacy. Therefore, one may suggest that the students polled in this research study believed in their ability to navigate the social environment less than they believed in their ability to perform in class. This discrepancy may be accounted for, in part, by the fact that participants in this study were community college students, who often experience isolation and minimum time on campus. They typically attend class and then leave campus immediately afterwards due to other obligations (e.g., work, family, etc.).

Typically, most students do not attend community colleges in order to socialize; rather, they attend community colleges to obtain a certification, to earn a technical or associate of arts degree, to recover credits, to earn transferrable academic credits, or to enter a vocational track leading directly to employment. As a result, the cultural and social experiences at most community colleges are much different than the cultural and
social experiences at four-year institutions. For example, most community colleges are not affiliated with fraternities or sororities, and fewer activities and social clubs are available for students. This could result from the fact that the average age of students attending community colleges is higher than the average age of students attending four-year institutions as well as the fact that most community college students commute (e.g., residential student housing is typically unavailable at most community colleges). Additionally, the administrative efforts at community colleges are aimed at increasing full-time enrollment (FTEs), academic achievement, and learning outcomes more than they are aimed at enhancing students’ social experience.

In addition, at four-year institutions, there are typically more traditional-age students (e.g., 18+). However, students who attend community colleges are typically older (e.g., 25+). As students get older in age, they may be less influenced by environmental factors (e.g., peer pressure) because older students know what they expect from their college experience; therefore, they may be somewhat less susceptible to certain environmental influences.

While college environmental factors (e.g., social groups, fraternities, sororities, etc.) are an important component to focus on among students who attend four-year institutions, community college students are less likely to be involved in such social activities. Additionally, older community college students likely have developed their personalities to a greater degree because they are older and more experienced. These older students typically are more mature and know what their purpose is in attending college, which could help explain why the results of this study indicated that the two-year college environment was not influenced by or correlated with college self-efficacy.
Contribution Four: Environment and Academic Achievement

A surprising result of this study was that college environment had no statistically significant relationship with academic achievement among African American males at two-year colleges. Prior research has suggested that some African American males have experienced difficulty fitting in, have felt unwelcomed, and have felt socially isolated by their peers and faculty members (Strayhorn, 2008). In fact, some scholars have attributed poor educational outcomes (retention, persistence, and degree attainment) to African American males’ sense of belonging (or lack thereof) in the college environment (Strayhorn, 2008). Researchers have demonstrated that it is important for safe places of expression of personal experiences to exist on campus (Dancey & Brown, 2008). Such places can be, for example, multicultural and ethnic centers that provide “culturally affirming environments and experiences” for students of color, including African American males (Harper & Hurtado, 2007, p. 20).

Supportive relationships with peers, faculty members, and staff members affirm a culturally supportive learning environment and ultimately facilitate a sense of belonging and connection to the college campus for African American male students (Rendon, 1994; Strayhorn, 2008). The participants in this study were community college students who felt welcome at their community colleges because they were involved in various learning communities on campus that assisted in their overall transition to college. Some of the students who completed the questionnaire for this study from Community College C were members of the Bridge to Success program and Project DEgree, which are programs that provide year-round mentoring support. At the other two community colleges, students were in TRiO programs, such as Student Support Services—a program
that provides students with year-round academic tutoring and mentoring. Nevertheless, even though students felt they were matriculating in a supportive environment, for these particular students, their perception of the environment was not correlated with their academic achievement.

In summary, supportive environments are important in the college setting because learning occurs best when students, particularly African American males, are in environments in which they feel connected, cared for, and trusted (Kezar et al., 2001; McClenney & Marti, 2006). Fostering positive relationships with students, peers, and faculty members promotes a positive educational environment for African American males. These positive relationships increase African American males’ self-efficacy and academic achievement (Bonner & Bailey, 2006).

There are three possible explanations to this finding. First, African American males may take the college environment for granted. Second, although they perceive the campus environment positively, they rarely utilize the services that are offered to them because they are commuters and have other obligations outside of school. Third, certain environments on campus are more socially oriented than academically oriented.

**Contribution Five: College Self-Efficacy and Academic Achievement**

African American males in this study indicated higher levels of course self-efficacy than social self-efficacy. To some extent, these results can be attributed to the role that expectations play in the classroom. All instructors either implicitly or explicitly maintain academic expectations for their students. In some cases, there may be times when students are unable to meet the expectations that instructors have set for them. While self-efficacy is an accurate predictor of ability and there are students who think
they can (and do) perform at high levels, the opposite is also true in that some students do not believe they can perform at high levels, and, not surprisingly, they don’t.

The importance of this finding, while it is not new, does raise some interesting issues related to instructors’ expectations that students do not necessarily feel they can meet. Some instructors have low expectations of African American male students, and other instructors have high expectations. According to Wildhagen (2002), many talented African American students are not reaching their full potential because of the low expectations that teachers have of them. Research has suggested that teachers’ expectations can significantly influence the performance of students, whether high or low. Wildhagen’s research has suggested that in order to establish a learning culture that is student centered, teachers must adjust their expectations and instructional practices so that students can learn to high levels.

Researchers have established that when teachers have high or low expectations of what their students can achieve, especially low-income and minority students, those expectations influence students’ achievement levels (Good, 1987). The misalignment of these expectations can have detrimental outcomes for African American males at community colleges. For example, when instructors’ expectations are so much higher than students’ perceived ability, this can result in their feeling defeated. The end result could be giving up their education and or dropping out of school. In short, high and low teacher expectations result in important consequences for African American males.

**Recommendations for Practice**

The results of this study suggest that potential changes should be made in the higher education environment in order to better serve African American males at two-
year colleges. The following section presents recommendations for practice by student affairs practitioners, administrators, and policymakers that are based on this study’s findings:

- As members of college administration who can help African American males achieve academic success at community colleges, student affairs practitioners can increase awareness of available programs on campus, especially academically-oriented programs by holding campus forums to engage students and create supportive campus climates.

- College administrators can bring awareness about social programs, peer tutoring services and activities that students can become involved with. They can implement and require study tables for this population to hold them accountable to their academics, and keep them engaged with their peer mentors. This will introduce them to social activities that would be socially stimulating for them to be a part of and create a positive social environment. Student affairs practitioners can bring awareness of “intrusive” advising and mentoring approaches to African American males and train staff members to perform early alerts on the student to assess how the student is performing academically and remove any institutional barriers. Student affairs practitioners can implement and administer a self-assessment inventory that identifies how African American males view their individual strengths and challenges as well as their receptivity to interventions early in the first term. This type of assessment will help prioritize interventions with at risk African American males and connect them with the incredible resources that are on
college campuses that are in place to help them be successful academically. For example, if an African American male scored very low on a self-assessment inventory, advisors could target this student throughout the semester by contacting him regularly and suggesting that he get involved in a campus group.

- Administrators on community college campuses could implement these four programs to increase the social self-efficacy of African American males and contribute to their overall success. All four of these programs share some common elements, including strategies aimed at supporting the inclusion and educational achievement of African American males in higher education.

Harris (2009) offered a brief description of four notable programs that have made a positive difference in the participation and success rates of African American males in postsecondary education. These programs can serve as a starting point and be adapted to meet the programmatic needs of the African American male population at community colleges:

1. Call Me Mister (CMM), a partnership between Clemson and three HBCUs, which aims to double the number of African American male teachers in South Carolina.

2. The University System of Georgia Board of Regents’ African American Male Initiative (AAMI), a system-wide effort to provide funding to programs at colleges and universities across the state that aim to enhance the recruitment and retention of African American males.
3. City University of New York (CUNY) Black Male Initiative (BMI), an initiative aimed at increasing the enrollment and graduation rates of Black males, individuals who have not graduated from high school, and formerly incarcerated individuals.

4. Student African American Brotherhood Organization (SAAB), an organization that exists at more than 100 high schools and colleges to foster academic excellence and community service among African American males.

- Federal and state policymakers in higher education can support a variety of programs that target African American male success by providing increased program funding to support these programs at community colleges to continue with the wraparound services that enhances the campus environment. Federal policymakers can establish a statewide consortium that focuses on African American males attending community colleges. This consortium could address the educational achievement levels and academic success of African American males and these policymakers can create change to assist these males achieve academic success.

**Recommendations for Future Research**

Several recommendations for future research can be provided based on the results of this study. The first recommendation for future research is to conduct a factor analysis on the overall instrument designed to measure college self-efficacy (e.g., course self-efficacy and social self-efficacy). Conducting psychometric research on this instrument allows future researchers interested in self-efficacy to more accurately and reliably
measure self-efficacy as it applies to African American males at two-year community colleges. There were highly interrelated subcomponents in the instrument that was used in this study, which was a drawback for using this instrument.

The second recommendation for future research is to use input characteristics as control variables, such as age, to advance this research. Almost half of the participants were 30 years of age or older. This attribute may have exerted an influence on college self-efficacy and perhaps even participants’ perceptions of the campus environment because community college students are older and typically are more seasoned (mature) than traditional-aged college students at four-year institutions. This research allows the researcher to gain information about how old the participants are and to determine whether they are more mature in their thinking and whether being older or younger is linked to high or low self-efficacy in African American males.

Additionally, there are a few areas that warrant further investigation on the topic of college self-efficacy, campus environment, and academic achievement of African American males in community colleges. In this study, college self-efficacy was a significant predictor of GPA and accounted for 11% of the influence on perceptions of campus environment. The third recommendation for further research is to solicit the perceptions of African American males in a qualitative study designed to explore factors that relate to their college self-efficacy, campus environment, and academic achievement at community colleges in Ohio. This qualitative study could also explore the reasons why campus environment was not a significant predictor of academic achievement for African American males in community colleges. A qualitative study allows students’ authentic voices to be heard and may identify the specific reasons why their self-efficacy is high or
low. Qualitative research may identify reasons why African American males at community colleges have been less likely to enter college with the skills and habits of behavior associated with academic success. Qualitative research also could be used to explain why African American males enroll in college with little leadership skills and other important social skills as well as a lack of a well-balanced sense of social responsibility. Further, a qualitative study allows researchers to explore reasons why African American males often have low expectations of their future and underestimate their abilities.

The fourth and final recommendation for future research is to explore differences in college self-efficacy, campus environment, and academic achievement between African American males and African American females at community colleges on a nationwide basis and to explore through a qualitative study why these differences occur. This study would provide educators in higher education with a nationwide study on specific ways that African American males and females experience college self-efficacy as well as how they view their campus environment. This future study would demonstrate key differences between both males and females and serve as a template for community college administrators who are specifically interested in identifying issues associated with college self-efficacy, campus environment, and academic achievement between both student populations.

**Conclusions**

High levels of college self-efficacy, high levels of course self-efficacy, and positive perceptions of campus environment are present among African American males at two-year colleges. This research study found that African American males in
community colleges have relatively high levels of college self-efficacy. In this research study, the researcher defined “college self-efficacy” using two components: course self-efficacy and social self-efficacy. The levels of course-self-efficacy were slightly higher among African American males’ at all three community colleges in this study, and social self-efficacy was slightly lower. African American males reported positive perceptions of their college environment at each community college. This result was surprising because research in the past has indicated that African American males have not maintained positive perceptions of their college environment.

In addition, the study also found that African American males who perceive a more positive campus environment tend to experience higher levels of college self-efficacy—more specifically, course self-efficacy. College self-efficacy also was a statistically significant predictor of expected GPA among African American males in two-year community colleges. Moreover, both of the components of college self-efficacy (i.e., course self-efficacy and social self-efficacy) were statistically significant predictors of expected GPA among African American males, while college environment was not.

Analysis of the data also indicated two additional findings: (a) college self-efficacy was a significant predictor of past-term GPA among African American males, but college environment was not, and (b) course self-efficacy and social self-efficacy were not statistically significant predictors of past-term GPA, and neither was college environment a statistically significant predictor of past-term GPA. The effect of campus climate on academic achievement did not vary based on the level of college self-efficacy, and the effect of campus climate on academic achievement did not vary based on course
self-efficacy or social self-efficacy for African American males who participated in this research study.

This study highlighted the necessity of college self-efficacy of African American males and provided a baseline for student services staff members, administrators, and policymakers with information regarding African American males and their levels of college self-efficacy at community colleges. Recommendations highlighted the necessity for student services staff members, administrators and policymakers to make this population of students a priority in higher education. African American males comprise a critical student population, and they need the support of administrators as well as accountability from staff members at community colleges to be academically successful in a higher education setting.
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Appendix A

Approval from Dr. Scott Solberg to Adapt College Self-Efficacy Instrument

From: Solberg, V. Scott [ssolberg@bu.edu]
Sent: Monday, March 19, 2012 11:59 AM
To: Jones, Jacquelyn R
Subject: RE: College Self Efficacy Instrument

Here you go. You have my permission. Good luck with your research.

scott

From: Jones, Jacquelyn R [mailto:Jacquelyn.Jones2@rockets.utoledo.edu]
Sent: Thursday, March 08, 2012 6:45 PM
To: Solberg, V. Scott
Subject: College Self Efficacy Instrument

Greetings from Ohio Dr. Solberg,
My name is Jacquelyn R. Jones and I am a doctoral student in the Higher Education Administration Ph.D. program at The University of Toledo. I am contacting you because I am very interested in using the CSEI in my research for my dissertation. My research will look at African American males and their college self-efficacy as it relates to academic achievement and college environment in community colleges in Ohio and Michigan. Therefore, I would be interested in adapting the CSEI to only asking the students about course efficacy and social efficacy (since roommate efficacy will not apply for this study). Any guidance or information you could provide me with would be greatly appreciated.

Thank you so much for your time and consideration. I look forward to hearing from you soon.

Cheers,
Jacquie

******************************************************************************************
Jacquelyn R. Jones
Doctoral Candidate, Higher Education Administration
Judith Herb College of Education
The University of Toledo
Toledo, OH 43606
Appendix B

Approval Letter from Dr. Alberta Gloria to Adapt University Environment Scale

Dr. Gloria,
Thanks again. I really appreciate this. We will be in touch very soon.
Jacquie

**********************************************************************
Jacquelyn R. Jones
Doctoral Candidate, Higher Education Administration
Judith Herb College of Education
The University of Toledo
Toledo, OH 43606

From: Alberta M. Gloria [agloria@education.wisc.edu]
Sent: Tuesday, March 27, 2012 2:42 PM
To: Jones, Jacquelyn R
Subject: Re: FW: University Environment Scale

Dear Jacquie ~ many thanks for your interest in using the University Environment Scale for your dissertation project. Please feel free to use the UES in your study as well as to modify the scale as needed to fit your study population. As we discussed, there are other scholars who have used a modified version of the scale with community college students and I would encourage you to take a look at their work. Also, please see the following site for how the UES has been used previously:
http://www.education.wisc.edu/cp/faculty/Gloria/ResearchScales.asp
Finally, as you indicate below, please do send me a final copy of your dissertation.

All the best with your study and please let me know if I can be of any assistance to you throughout the final stages of your graduate training.
Best,
Dr. Gloria

On 3/27/2012 12:41 PM, Jones, Jacquelyn R wrote:
Hi Dr. Gloria,
It was wonderful chatting with you this afternoon. Thank for you for your verbal permission to modify the University Environment Scale for my dissertation research by calling it the College Environment Scale (for community college students). I will also take a look at Edman and Brazil's work as well. Can please reply to this email so that I have your permission in writing for my committee? I would greatly appreciate that. I will be sure to send you a copy of my completed dissertation once it is done so that you can read it and have it on file. Thanks again!
Jacquie

**********************************************************************
Jacquelyn R. Jones
Doctoral Candidate, Higher Education Administration
Judith Herb College of Education
The University of Toledo
Toledo, OH 43606
Greetings from Ohio Dr. Gloria,
My name is Jacquelyn R. Jones and I am a doctoral student in the Higher Education Administration Ph.D. program at The University of Toledo. I am contacting you because I am very interested in using the UES in my research for my dissertation. I could not find an email address for your colleague, Dr. Sharon E. Robinson-Kurpius who also worked with you on the UES. My research will look at African American males and their college self-efficacy as it relates to academic achievement and college environment in community colleges in Ohio and Michigan. Therefore, I would be interested in adapting the UES and calling it the College Environment Scale (CES) to reflect the community college nature of my research study. I am not interested in adapting anything else with this scale for my study (just the name). Any guidance or information you could provide me with would be greatly appreciated.

Thank you so much for your time and consideration. I look forward to hearing from you soon.

Cheers,
Jacquie

********************************************
Jacquelyn R. Jones
Doctoral Candidate, Higher Education Administration
Judith Herb College of Education
The University of Toledo
Toledo, OH 43606
Appendix C

Campus Climate and Self-Efficacy Student Survey

Thank you for taking time to complete this survey that examines your thoughts about your educational experiences at your community college. Do not spend a lot of time on each question; respond with your first reaction. The survey should take no longer than 20 minutes. Please select the most appropriate answer to each question and please do not leave any blank.

**** Do not write your name on this survey****

SECTION I: COLLEGE SELF-EFFICACY

Directions: Think about yourself as a college student. For each of the statements below, select the number that best represents your degree of confidence in completing the tasks associated with being a student at your community college.

How confident are you that you could successfully complete the following tasks:
(Select one number)

<table>
<thead>
<tr>
<th>0 - totally unconfident</th>
<th>5 - somewhat confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - very unconfident</td>
<td>6 - confident</td>
</tr>
<tr>
<td>2 - unconfident</td>
<td>7 - very confident</td>
</tr>
<tr>
<td>3 - somewhat unconfident</td>
<td>8 - totally confident</td>
</tr>
<tr>
<td>4 - undecided</td>
<td></td>
</tr>
</tbody>
</table>

1. Make new friends at college..........................................................0 1 2 3 4 5 6 7 8
2. Talk to your professors/instructors..............................................0 1 2 3 4 5 6 7 8
3. Take good class notes.........................................................................0 1 2 3 4 5 6 7 8
4. Research a term paper........................................................................0 1 2 3 4 5 6 7 8
5. Join an intramural sports team............................................................0 1 2 3 4 5 6 7 8
6. Understand your textbooks.................................................................0 1 2 3 4 5 6 7 8
7. Get a date when you want one..............................................................0 1 2 3 4 5 6 7 8
8. Ask a professor or instructor a question outside of class.......................0 1 2 3 4 5 6 7 8
9. Write a course paper............................................................................0 1 2 3 4 5 6 7 8
10. Work on a group project.................................................................0 1 2 3 4 5 6 7 8
11. Do well on your exams......................................................................0 1 2 3 4 5 6 7 8
12. Talk with a school academic and support staff (e.g. advising)..............0 1 2 3 4 5 6 7 8
13. Manage your time effectively.............................................................0 1 2 3 4 5 6 7 8
14. Use the Library................................................................................0 1 2 3 4 5 6 7 8
15. Join a student organization..........................................................0 1 2 3 4 5 6 7 8
16. Ask a question in class..............................................................0 1 2 3 4 5 6 7 8
17. Participate in class discussions................................................0 1 2 3 4 5 6 7 8
18. Keep up to date with your school work......................................0 1 2 3 4 5 6 7 8

SECTION II: COLLEGE ENVIRONMENT PERCEPTIONS

Directions: For each of the following items, to what extent have you experienced the feeling or situation at your community college? For each statement, select the number that best represents your perception.

Not At All                                      All The Time

                                1  2  3  4  5

                                    Not All The Time

1  2  3  4  5.............. 1. Class sizes are so large that I feel like a number
1  2  3  4  5.............. 2. The library staff is willing to help me find materials/books.
1  2  3  4  5.............. 3. College staff have been warm and friendly.
1  2  3  4  5.............. 4. I do not feel valued as a student on campus.
1  2  3  4  5.............. 5. Faculty have not been available to discuss my academic concerns.
1  2  3  4  5.............. 6. Financial aid staff has been willing to help me with financial concerns.
1  2  3  4  5.............. 7. The college encourages/sponsors ethnic groups on campus.
1  2  3  4  5.............. 8. There are tutoring services available for me on campus.
1  2  3  4  5.............. 9. The college seems to value minority students.
1  2  3  4  5.............. 10. Faculty have been available for help outside of class.
1  2  3  4  5.............. 11. The college seems like a cold, uncaring place to me.
1  2  3  4  5.............. 12. Faculty have been available to help me make course choices.
1  2  3  4  5.............. 13. I feel as if no one cares about me personally on this campus.
1  2  3  4  5.............. 14. I feel comfortable in the college environment.
SECTION III: ACADEMICS

With the current academic term in mind, please answer the following questions about your course load:

Are you a full-time student ___Yes ___ No
Are you taking any on-line course? ___Yes ___ No
If you answered yes to taking on-line courses, are half or more of your courses on-line? ___Yes ___No

Please indicate, to the best of your knowledge, what your Grade Point Average (GPA) was for the last academic term you were enrolled at your community college. (Select not applicable if this is your first term as a student at this college.)

___ 3.50 – 4.00 (Mostly A/B+ Grades)
___3.00 – 3.49 (Mostly B Grades)
___2.50 – 2.99 (Mostly B-/C+ Grades)
___2.00 – 2.49 (Mostly C Grades)
___1.50 – 1.99 (Mostly C-/D+ Grades)
___0.00 – 1.49 (Mostly D or Below Grades)
___ Not applicable

Thinking about this term, what Grade Point Average (GPA) do you expect you will earn?

___ 3.50 – 4.00 (Mostly A/B+ Grades)
___3.00 – 3.49 (Mostly B Grades)
___2.50 – 2.99 (Mostly B-/C+ Grades)
___2.00 – 2.49 (Mostly C Grades)
__1.50 – 1.99 (Mostly C-/D+ Grades)
__0.00 – 1.49 (Mostly D or Below Grades)

SECTION IV: DEMOGRAPHICS

AGE:
__50-64  __65 and over

GENDER:

☐ MALE
☐ FEMALE

WHAT IS YOUR RACE/ETHNICITY?

☐ AFRICAN AMERICAN
☐ BI-RACIAL- MIXED WITH AFRICAN AMERICAN AND OTHER RACE
☐ CAUCASIAN
☐ HISPANIC
☐ ASIAN PACIFIC AMERICAN
☐ OTHER

Thank you for taking time to complete this survey!

Your response has been recorded.
Appendix D

Email to Participants

Dear NAME OF STUDENT,

You have been selected to participate in a research project because you are enrolled in the Fall 2012 semester in a community college in the state of Ohio and are an African American male. The researcher, Jacquelyn R. Jones, is a doctoral student at the University of Toledo, and this project is for her dissertation work. The research project is studying the relationship between college self-efficacy and campus environment perceptions in relation to academic achievement.

If you choose to participate, please read the Participant Information Letter below in this email. This form explains that if you choose to open the survey link below, you are agreeing and consenting that the information you provide may be included in this research study. Next, please click on the survey link below and fill out the entire survey. Please note that this survey and research have been approved by the colleges Institutional Review Board (IRB). Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time without penalty. Thank you for helping with this important project.

Click the link below to begin the survey. This constitutes your consent to participate in this study.
Survey Link: https://utoledo.edu.qualtrics.com/SE/?SID=SV_8k6loUVauv4nPgN

If you have any questions about this study, please contact me at Jacquelyn Jones@owens.edu or jacquelyn.jones2@rockets.utoledo.edu if you have any additional questions.

Sincerely,
Jacquelyn R. Jones
Ph.D. Candidate
The University of Toledo
Appendix E

Letter to Participants

Dear Participant:

I invite you to participate in the survey. The purpose of the survey is to collect information that will help the researcher analyze college self-efficacy, campus environment perceptions and academic achievement of African American males at two year community colleges in the state of Ohio. The research for this study is being conducted by a current doctoral student at the University of Toledo.

If you agree to participate in this study, data will be collected in four different areas. First, you will be asked to complete information on college self-efficacy. Second, you will be asked to complete information on college environment perceptions. Third, you will be asked to complete information on your academic achievement. Fourth, you will be asked to complete your demographic information. The survey should take no longer than 20 minutes.

Please do not hesitate to ask any questions about the study either before participating or during the time of participation. The information you provide will be held in strict confidence and the data reported will be anonymous. The researcher will be happy to share her findings with you once the research is completed. However, your name will not be connected to the research findings in any way, and your identity as a participant will only be known to the researcher. The following information is provided for you to decide whether you wish to participate in this study. You should be aware that you are free to decide not to participate or withdraw at any time without affecting your relationship with the researcher or with the University of Toledo.

There are no known risks and/or discomforts associated with this study. Your participation will allow your experiences in higher education to add to the literature on this very important topic in our society. To show appreciation for your willingness to take part in this study, the researcher will make available a summary of the results for you and you will be entered into a drawing for a free Visa gift card.

By opening the survey web link, you are consenting that the information in this survey may be used in this research project. Please contact the Student Investigator, Jacquelyn Jones (jacquelyn.jones2@rockets.utoledo.edu) or the Principal Investigator, Dr. Snejana Slantcheva-Durst (snejana.slantchevadurst.utoledo.edu) if you have any questions regarding this research project. Thank you for your participation in this study.

Sincerely,

Jacquelyn R. Jones
Ph.D. Candidate
The University of Toledo